

**GOLDMAN SACHS BANK USA AND SUBSIDIARIES**

Unaudited Semi-Annual Report  
for the period ended June 30, 2016

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## Condensed Consolidated Statements of Earnings (Unaudited)

<i>\$ in millions</i>	Six Months Ended June	
	2016	2015
<b>Revenues</b>		
Interest income	\$ 1,302	\$ 962
Interest expense	537	302
Net interest income	765	660
Gains and losses from financial instruments, net	816	869
Other revenues	85	111
Provision for losses on loans and lending commitments	(95)	(25)
Total non-interest revenues	806	955
Net revenues, including net interest income	1,571	1,615
<b>Operating expenses</b>		
Compensation and benefits	112	99
Service charges	250	280
Other expenses	140	100
Total operating expenses	502	479
Pre-tax earnings	1,069	1,136
Provision for taxes	357	430
<b>Net earnings</b>	<b>\$ 712</b>	<b>\$ 706</b>

The accompanying notes are an integral part of these condensed consolidated financial statements.

## Condensed Consolidated Statements of Financial Condition (Unaudited)

	As of	
	June 2016	December 2015
<i>\$ in millions, except share and per share amounts</i>		
<b>Assets</b>		
Cash	\$ 72,797	\$ 50,045
Collateralized agreements:		
Securities purchased under agreements to resell (including \$2,115 and \$1,025 at fair value as of June 2016 and December 2015, respectively)	3,375	2,481
Receivables:		
Loans receivable	39,036	37,874
Customers and counterparties, brokers, dealers and clearing organizations	8,849	6,085
Financial instruments owned, at fair value (includes \$4,092 and \$5,358 pledged as collateral as of June 2016 and December 2015, respectively)	35,158	36,601
Other assets	1,458	1,416
<b>Total assets</b>	<b>\$ 160,673</b>	<b>\$ 134,502</b>
<b>Liabilities and shareholder's equity</b>		
Deposits (includes \$5,114 and \$6,150 at fair value as of as of June 2016 and December 2015, respectively)	\$ 113,923	\$ 88,284
Collateralized financings:		
Securities sold under agreements to repurchase, at fair value	3,319	3,425
Other secured financings (includes \$2,423 and \$2,919 at fair value as of June 2016 and December 2015, respectively)	2,570	3,026
Payables to customers and counterparties, brokers, dealers and clearing organizations	4,495	3,495
Financial instruments sold, but not yet purchased, at fair value	8,080	8,510
Unsecured borrowings (includes \$241 and \$98 at fair value as of June 2016 and December 2015, respectively)	2,245	2,159
Other liabilities and accrued expenses	2,154	2,419
<b>Total liabilities</b>	<b>136,786</b>	<b>111,318</b>
<b>Commitments, contingencies and guarantees</b>		
<b>Shareholder's equity</b>		
Shareholder's equity (includes common stock, par value \$100 per share; 80,000,000 shares authorized, issued and outstanding)	23,887	23,184
<b>Total liabilities and shareholder's equity</b>	<b>\$ 160,673</b>	<b>\$ 134,502</b>

The accompanying notes are an integral part of these condensed consolidated financial statements.

## Condensed Consolidated Statements of Changes in Shareholder's Equity (Unaudited)

<i>\$ in millions</i>	Six Months Ended June 2016	Year Ended December 2015
<b>Shareholder's equity</b>		
Shareholder's equity, beginning of year	\$ 23,184	\$ 21,502
Net earnings	712	1,682
Other comprehensive loss	(9)	-
<b>Shareholder's equity, end of period</b>	<b>\$ 23,887</b>	<b>\$ 23,184</b>

The accompanying notes are an integral part of these condensed consolidated financial statements.

## Condensed Consolidated Statements of Cash Flows (Unaudited)

<i>\$ in millions</i>	Six Months Ended June	
	2016	2015
<b>Cash flows from operating activities</b>		
Net earnings	\$ 712	\$ 706
Adjustments to reconcile net earnings to net cash provided by/(used for) operating activities		
Depreciation and amortization	4	1
Deferred income taxes	(91)	30
Share-based compensation	8	4
Provision for losses on loans and lending commitments	95	25
Changes in operating assets and liabilities		
Loans held for sale	(1,368)	(1,279)
Receivables and payables (excluding loans receivable), net	(1,764)	(3,355)
Collateralized transactions (excluding other secured financings), net	(1,000)	3,179
Financial instruments owned, at fair value	1,443	3,741
Financial instruments sold, but not yet purchased, at fair value	(430)	(2,492)
Other, net	(968)	(709)
Net cash used for operating activities	(3,359)	(149)
<b>Cash flows from investing activities</b>		
Net cash acquired in business acquisition	16,491	–
Loans receivable, net (excluding loans held for sale)	160	(7,474)
Net cash provided by/(used for) investing activities	16,651	(7,474)
<b>Cash flows from financing activities</b>		
Deposits, net	9,865	5,066
Proceeds from/(repayment of) issuance of other secured financings	(491)	1,501
Other, net	86	(23)
Net cash provided by financing activities	9,460	6,544
Net increase/(decrease) in cash	22,752	(1,079)
Cash, beginning of period	50,045	39,856
<b>Cash, end of period</b>	<b>\$ 72,797</b>	<b>\$ 38,777</b>

### SUPPLEMENTAL DISCLOSURES:

Cash payments for interest were \$405 million and \$202 million during the six months ended June 2016 and June 2015, respectively.

There were no cash payments for income taxes for the six months ended June 2016. Net cash payments for income taxes were \$102 million during the six months ended June 2015.

The accompanying notes are an integral part of these condensed consolidated financial statements.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Note 1.

#### Description of Business

Goldman Sachs Bank USA, together with its consolidated subsidiaries (collectively, the Bank), is a New York State-chartered bank and a member of the Federal Reserve System. It is supervised by the Board of Governors of the Federal Reserve System (Federal Reserve Board), the New York State Department of Financial Services (NYSDFS) and the Consumer Financial Protection Bureau (CFPB) and is a member of the Federal Deposit Insurance Corporation (FDIC). The Bank's deposits are insured by the FDIC up to the maximum amount permitted by law. As a registered swap dealer, the Bank is also regulated by the U.S. Commodity Futures Trading Commission (CFTC). The Bank is also registered as a government securities dealer and is subject to the rules and regulations of the U.S. Department of the Treasury.

The Bank's principal office is located in New York, New York. The Bank operates one domestic branch located in Salt Lake City, Utah, which is regulated by the Utah Department of Financial Institutions. The Bank also operates a branch in London, United Kingdom (the London Branch), which is regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

The Bank is a wholly-owned subsidiary of The Goldman Sachs Group, Inc. (Group Inc.). The Federal Reserve Board is the primary regulator of Group Inc., a bank holding company under the Bank Holding Company Act of 1956 (BHC Act) and a financial holding company under the amendments to the BHC Act effected by the U.S. Gramm Leach Bliley Act of 1999.

The Bank's primary activities include lending, derivative activities, and deposit taking. The Bank is a lender to private wealth management clients of Goldman, Sachs & Co. (GS&Co.), to institutional and corporate clients, and to retail customers. The Bank enters into interest rate, credit, currency and other derivatives and related products for the purpose of market making and risk management. The Bank accepts deposits from private wealth management clients, online retail customers and deposit sweep programs and issues brokered certificates of deposits.

The following activities are conducted in the Bank's significant operating subsidiaries:

Goldman Sachs Mitsui Marine Derivative Products, L.P. (MMDP), a Delaware limited partnership, acts as an intermediary in transactions involving derivative contracts. MMDP is able to provide credit rating enhancement to derivative products due to its partnership with an external party, Mitsui Sumitomo Insurance Co., Ltd. (Mitsui Sumitomo).

Goldman Sachs Mortgage Company, a New York limited partnership, originates commercial mortgage loans and purchases commercial and residential mortgage loans and other consumer loan assets for securitization and market-making.

All subsidiaries of the Bank are wholly-owned by the Bank, with the exception of MMDP, in which Mitsui Sumitomo has a 50% interest.

### Note 2.

#### Basis of Presentation

These condensed consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP) and include the accounts of the Bank and all other entities in which the Bank has a controlling financial interest. Intercompany transactions and balances within the Bank have been eliminated.

These condensed consolidated financial statements are unaudited and should be read in conjunction with the audited consolidated financial statements included in the Bank's Annual Report for the year ended December 31, 2015. References to the "2015 Annual Report" are to the Bank's Annual Report for the year ended December 31, 2015. The condensed consolidated financial information as of December 31, 2015 has been derived from audited consolidated financial statements not included herein.

These unaudited condensed consolidated financial statements reflect all adjustments that are, in the opinion of management, necessary for a fair statement of the results for the interim periods presented. These adjustments are of a normal, recurring nature. Interim period operating results may not be indicative of the operating results for a full year.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

All references to June 2016 and June 2015 refer to the Bank's periods ended, or the dates, as the context requires, June 30, 2016 and June 30, 2015, respectively. All references to December 2015 refer to the date December 31, 2015. Any reference to a future year refers to a year ending on December 31 of that year. Certain reclassifications have been made to previously reported amounts to conform to the current presentation.

### Note 3. Significant Accounting Policies

The Bank's significant accounting policies include when and how to measure the fair value of assets and liabilities, accounting for loans at amortized cost net of allowance for loan losses, accounting for deposits and when to consolidate an entity. See Notes 5 through 8 for policies on fair value measurements, Note 9 for policies on accounting for loans receivable, Note 13 for policies on deposits, and below and Note 11 for policies on consolidation accounting. All other significant accounting policies are either described below or included in the following footnotes:

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Derivatives and Hedging Activities	Note 7
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### Consolidation

The Bank consolidates entities in which the Bank has a controlling financial interest. The Bank determines whether it has a controlling financial interest in an entity by first evaluating whether the entity is a voting interest entity or a variable interest entity (VIE).

**Voting Interest Entities.** Voting interest entities are entities in which (i) the total equity investment at risk is sufficient to enable the entity to finance its activities independently and (ii) the equity holders have the power to direct the activities of the entity that most significantly impact its economic performance, the obligation to absorb the losses of the entity and the right to receive the residual returns of the entity. The usual condition for a controlling financial interest in a voting interest entity is ownership of a majority voting interest. If the Bank has a controlling majority voting interest in a voting interest entity, the entity is consolidated.

**Variable Interest Entities.** A VIE is an entity that lacks one or more of the characteristics of a voting interest entity. The Bank has a controlling financial interest in a VIE when the Bank has a variable interest or interests that provide it with (i) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance, and (ii) the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE. See Note 11 for further information about VIEs.

### Use of Estimates

Preparation of these condensed consolidated financial statements requires management to make certain estimates and assumptions, the most important of which relate to fair value measurements, the allowance for losses on loans and lending commitments held for investment, discretionary compensation accruals and the provisions for losses that may arise from litigation, regulatory proceedings and tax audits. These estimates and assumptions are based on the best available information but actual results could be materially different.



## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Revenue Recognition – Financial Assets and Financial Liabilities at Fair Value

Financial instruments owned, at fair value and Financial instruments sold, but not yet purchased, at fair value are recorded at fair value either under the fair value option or in accordance with other U.S. GAAP. In addition, the Bank has elected to account for certain of its other financial assets and financial liabilities at fair value by electing the fair value option. The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. Fair value gains or losses are included in “Gains and losses from financial instruments, net.” See Notes 5 through 8 for further information about fair value measurements. In addition, the Bank recognizes income related to the syndication of loans and lending commitments and other fees from affiliates in “Gains and losses from financial instruments, net.”

### Transfers of Assets

Transfers of assets are accounted for as sales when the Bank has relinquished control over the assets transferred. For transfers of assets accounted for as sales, any gains or losses are recognized in “Gains and losses from financial instruments, net.” Assets or liabilities that arise from the Bank’s continuing involvement with transferred assets are recognized at fair value. For transfers of assets that are not accounted for as sales, the assets generally remain in “Financial instruments owned, at fair value” or “Loans receivable” and the transfer is accounted for as a collateralized financing, with the related interest expense recognized over the life of the transaction. See Note 10 for further information about transfers of assets accounted for as collateralized financings.

### Securitization Activities

The Bank transfers portfolios of commercial mortgages to its affiliates for purposes of securitization. The Bank accounts for the transfer as a sale when it has relinquished control over the transferred assets. The Bank accounts for assets pending transfer at fair value and therefore does not typically recognize significant gains or losses upon the transfer of assets. The Bank generally receives cash in exchange for the transferred assets. As of June 2016 and December 2015, the Bank had no continuing involvement with transferred assets.

### Cash

Cash is comprised of highly liquid overnight deposits held in the ordinary course of business. As of June 2016 and December 2015, cash included \$72.53 billion and \$49.62 billion, respectively, of interest-bearing deposits with banks. Of these amounts, \$72.35 billion and \$49.36 billion were held at the Federal Reserve Bank of New York, which exceeded regulatory reserve requirements of \$105 million and \$110 million as of June 2016 and December 2015, respectively. As of June 2016 and December 2015, cash also included \$102 million and \$125 million, respectively, of restricted cash primarily from cash collateral received that the Bank does not have the right to deliver or repledge.

### Receivables from Customers and Counterparties, Brokers, Dealers and Clearing Organizations

Receivables from customers and counterparties, brokers, dealers and clearing organizations are primarily comprised of collateral posted in connection with certain derivative transactions and receivables related to pending unsettled trades. Receivables from customers and counterparties, brokers, dealers and clearing organizations are accounted for at amortized cost net of estimated uncollectible amounts, which generally approximates fair value. While these receivables are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the Bank’s fair value hierarchy in Notes 6 through 8. Had these receivables been included in the Bank’s fair value hierarchy, substantially all would have been classified in level 2 as of June 2016 and December 2015. Interest on receivables from customers and counterparties, brokers, dealers and clearing organizations is recognized over the life of the transaction and included in “Interest income.”

### Payables to Customers and Counterparties, Brokers, Dealers and Clearing Organizations

Payables to customers and counterparties, brokers, dealers and clearing organizations primarily consist of collateralized payables related to client transactions, including collateral received in connection with certain derivative transactions. Payables to customers and counterparties, brokers, dealers and clearing organizations are accounted for at cost plus accrued interest, which generally approximates fair value.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

While these payables are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the Bank's fair value hierarchy in Notes 6 through 8. Had these payables been carried at fair value and included in the Bank's fair value hierarchy, substantially all would have been classified in level 2 as of June 2016 and December 2015. Interest on payables to customers and counterparties, brokers, dealers and clearing organizations is recognized over the life of the transaction and included in "Interest expense."

### Offsetting Assets and Liabilities

To reduce credit exposures on derivatives and securities financing transactions, the Bank may enter into master netting agreements or similar arrangements (collectively, netting agreements) with counterparties that permit it to offset receivables and payables with such counterparties. A netting agreement is a contract with a counterparty that permits net settlement of multiple transactions with that counterparty, including upon the exercise of termination rights by a non-defaulting party. Upon exercise of such termination rights, all transactions governed by the netting agreement are terminated and a net settlement amount is calculated. In addition, the Bank receives and posts cash and securities collateral with respect to its derivatives and securities financing transactions, subject to the terms of the related credit support agreements or similar arrangements (collectively, credit support agreements). An enforceable credit support agreement grants the non-defaulting party exercising termination rights the right to liquidate the collateral and apply the proceeds to any amounts owed. In order to assess enforceability of the Bank's right of setoff under netting and credit support agreements, the Bank evaluates various factors including applicable bankruptcy laws, local statutes and regulatory provisions in the jurisdiction of the parties to the agreement.

Derivatives are reported on a net-by-counterparty basis (i.e., the net payable or receivable for derivative assets and liabilities for a given counterparty) in the condensed consolidated statements of financial condition when a legal right of setoff exists under an enforceable netting agreement. Resale and repurchase agreements with the same term and currency are presented on a net-by-counterparty basis in the condensed consolidated statements of financial condition when such transactions meet certain settlement criteria and are subject to netting agreements.

In the condensed consolidated statements of financial condition, derivatives are reported net of cash collateral received and posted under enforceable credit support agreements, when transacted under an enforceable netting agreement. In the condensed consolidated statements of financial condition, resale and repurchase agreements are not reported net of the related cash and securities received or posted as collateral. In addition, certain other receivables and payables with affiliate broker dealers that meet the criteria of offsetting are reported on a net basis in the condensed consolidated statements of financial condition. See Note 10 for further information about collateral received and pledged, including rights to deliver or repledge collateral. See Notes 7 and 10 for further information about offsetting.

### Foreign Currency Translation

Assets and liabilities denominated in non-U.S. currencies are translated at rates of exchange prevailing on the date of the condensed consolidated statements of financial condition and revenues and expenses are translated at average rates of exchange for the period. Foreign currency remeasurement gains or losses on transactions in nonfunctional currencies are recognized in earnings.

### Recent Accounting Developments

#### Revenue from Contracts with Customers (ASC 606).

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)." ASU No. 2014-09 provides comprehensive guidance on the recognition of revenue from customers arising from the transfer of goods and services. The ASU also provides guidance on accounting for certain contract costs, and requires new disclosures. ASU No. 2014-09, as amended by ASU No. 2015-14, ASU No. 2016-08, ASU No. 2016-10 and ASU No. 2016-12, is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period under a modified retrospective approach or retrospectively to all periods presented. Early adoption is permitted for annual reporting periods beginning after December 15, 2016. The Bank is still evaluating the effect of the ASU on its financial condition, results of operations, and cash flows.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

**Amendments to the Consolidation Analysis (ASC 810).** In February 2015, the FASB issued ASU No. 2015-02, “Consolidation (Topic 810) — Amendments to the Consolidation Analysis.” ASU No. 2015-02 eliminates the deferral of the requirements of ASU No. 2009-17, “Consolidations (Topic 810) — Improvements to Financial Reporting by Enterprises Involved with Variable Interest Entities” for certain interests in investment funds and provides a scope exception from Topic 810 for certain investments in money market funds. The ASU also makes several modifications to the consolidation guidance for VIEs and general partners’ investments in limited partnerships, as well as modifications to the evaluation of whether limited partnerships are VIEs or voting interest entities. ASU No. 2015-02 was effective for interim and annual reporting periods beginning after December 15, 2015 and was required to be adopted under a modified retrospective approach or retrospectively to all periods presented. The Bank adopted ASU No. 2015-02 as of January 1, 2016, using a modified retrospective approach. The impact of adoption was not material to the Bank’s statement of financial condition or results of operations.

**Simplifying the Presentation of Debt Issuance Costs (ASC 835).** In April 2015, the FASB issued ASU No. 2015-03, “Interest — Imputation of Interest (Subtopic 835-30) — Simplifying the Presentation of Debt Issuance Costs.” ASU No. 2015-03 simplifies the presentation of debt issuance costs by requiring that these costs related to a recognized debt liability be presented in the statement of financial condition as a direct reduction from the carrying amount of that liability. ASU No. 2015-03 is effective for annual reporting periods beginning after December 15, 2015, including interim periods within that reporting period. ASU No. 2015-03 is required to be applied retrospectively to all periods presented beginning in the year of adoption. Early adoption was permitted. The Bank early adopted ASU No. 2015-03 in September 2015.

**Simplifying the Accounting for Measurement-Period Adjustments (ASC 805).** In September 2015, the FASB issued ASU No. 2015-16, “Business Combinations (Topic 805) — Simplifying the Accounting for Measurement-Period Adjustments.” ASU No. 2015-16 eliminates the requirement for an acquirer in a business combination to account for measurement-period adjustments retrospectively. ASU No. 2015-16 was effective for annual reporting periods beginning after December 15, 2015, including interim periods within that reporting period.

Adoption of ASU No. 2015-16 did not materially affect the Bank’s financial condition, results of operations, or cash flows.

**Recognition and Measurement of Financial Assets and Financial Liabilities (ASC 825).** In January 2016, the FASB issued ASU No. 2016-01 “Financial Instruments (Topic 825) — Recognition and Measurement of Financial Assets and Financial Liabilities.” ASU No. 2016-01 amends certain aspects of recognition, measurement, presentation and disclosure of financial instruments. This guidance includes a requirement to present separately in other comprehensive income changes in fair value attributable to a Bank’s own credit spreads (debt valuation adjustment or DVA), net of tax, on financial liabilities for which the fair value option was elected. ASU No. 2016-01 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. Early adoption is permitted under a modified retrospective approach for the requirements related to DVA. In the first quarter of 2016, the Bank early adopted ASU No. 2016-01 for the requirements related to DVA, and reclassified the cumulative DVA, a gain of \$13 million (net of tax), from retained earnings to accumulated other comprehensive loss.

**Measurement of Credit Losses on Financial Instruments (ASC 326).** In June 2016, the FASB issued ASU No. 2016-13, “Financial Instruments — Credit Losses (Topic 326) — Measurement of Credit Losses on Financial Instruments.” ASU No. 2016-13 requires financial assets that are measured at amortized cost to be presented, net of an allowance for credit losses, at the amount expected to be collected over their estimated life. Expected credit losses for newly recognized financial assets, as well as changes to credit losses during the period, are recognized in earnings. For certain purchased financial assets with deterioration in credit quality since origination, the initial allowance for expected credit losses will be recorded as an increase to the purchase price. Expected credit losses, including losses on off-balance sheet exposure such as lending commitments, will be measured based on historical experience, current conditions and forecasts that affect the collectability of the reported amount. ASU No. 2016-13 is effective for annual reporting periods beginning after December 15, 2019, including interim periods within that reporting period under a modified retrospective approach. Early adoption is permitted for periods beginning after December 15, 2018. The Bank is still evaluating the effect of the ASU on its financial condition, results of operations, and cash flows.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Note 4.

#### Financial Instruments Owned, at Fair Value and Financial Instruments Sold, But Not Yet Purchased, at Fair Value

Financial instruments owned, at fair value and financial instruments sold, but not yet purchased, at fair value are accounted for at fair value either under the fair value option or in accordance with other U.S. GAAP. See Note 8 for further information about other financial assets and financial liabilities accounted for at fair value primarily under the fair value option.

The table below presents the Bank's financial instruments owned, at fair value, and financial instruments sold, but not yet purchased, at fair value.

<i>\$ in millions</i>	Financial Instruments Owned	Financial Instruments Sold, But Not Yet Purchased
<b>As of June 2016</b>		
U.S. government and federal agency obligations	\$ 12,090	\$ 1,650
Non-U.S. government and agency obligations	152	6
Loans and securities backed by:		
Commercial real estate	510	1
Residential real estate	6,364	-
Bank loans and bridge loans	1,928	266
Other <sup>1</sup>	510	8
Investments in funds at NAV	17	-
Subtotal	21,571	1,931
Derivatives	13,587	6,149
<b>Total</b>	<b>\$ 35,158</b>	<b>\$ 8,080</b>
<b>As of December 2015</b>		
U.S. government and federal agency obligations	\$ 14,707	\$ 2,232
Non-U.S. government and agency obligations	234	6
Loans and securities backed by:		
Commercial real estate	1,510	1
Residential real estate	5,990	2
Bank loans and bridge loans	2,828	270
Other <sup>1</sup>	501	22
Investments in funds at NAV	17	-
Subtotal	25,787	2,533
Derivatives	10,814	5,977
<b>Total</b>	<b>\$ 36,601</b>	<b>\$ 8,510</b>

1. Primarily consists of other debt obligations and equities.

#### Gains and Losses from Financial Instruments, Net

The table below presents "Gains and losses from financial instruments, net."

<i>\$ in millions</i>	Six Months Ended June	
Product Type	2016	2015
Interest rates	\$ 304	\$ (797)
Currencies	185	959
Credit	388	710
Equity	(55)	(7)
Other	(6)	4
<b>Total</b>	<b>\$ 816</b>	<b>\$ 869</b>

In the table above:

- Gains/(losses) include both realized and unrealized gains and losses, and are primarily related to the Bank's financial instruments owned, at fair value and financial instruments sold, but not yet purchased, at fair value, including both derivative and non-derivative financial instruments, and the syndication of loans and lending commitments.
- Gains/(losses) exclude related interest income and interest expense. See Note 19 for further information about interest income and interest expense.
- Gains/(losses) are not representative of the manner in which the Bank manages its business activities because many of the Bank's market-making, lending and other activities utilize financial instruments across various product types. Accordingly, gains or losses in one product type frequently offset gains or losses in other product types. For example, many of the Bank's interest rate derivatives are sensitive to changes in foreign currency exchange rates and may be economically hedged with foreign currency contracts.

### Note 5.

#### Fair Value Measurements

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Financial assets are marked to bid prices and financial liabilities are marked to offer prices. Fair value measurements do not include transaction costs. The Bank measures certain financial assets and financial liabilities as a portfolio (i.e., based on its net exposure to market and/or credit risks).

## Notes to Condensed Consolidated Financial Statements (Unaudited)

The best evidence of fair value is a quoted price in an active market. If quoted prices in active markets are not available, fair value is determined by reference to prices for similar instruments, quoted prices or recent transactions in less active markets, or internally developed models that primarily use market-based or independently sourced parameters as inputs including, but not limited to, interest rates, volatilities, equity or debt prices, foreign exchange rates, commodity prices, credit spreads and funding spreads (i.e., the spread, or difference, between the interest rate at which a borrower could finance a given financial instrument relative to a benchmark interest rate).

U.S. GAAP has a three-level fair value hierarchy for disclosure of fair value measurements. The fair value hierarchy prioritizes inputs to the valuation techniques used to measure fair value, giving the highest priority to level 1 inputs and the lowest priority to level 3 inputs. A financial instrument's level in the fair value hierarchy is based on the lowest level of input that is significant to its fair value measurement. The fair value hierarchy is as follows:

**Level 1.** Inputs are unadjusted quoted prices in active markets to which the Bank had access at the measurement date for identical, unrestricted assets or liabilities.

**Level 2.** Inputs to valuation techniques are observable, either directly or indirectly.

**Level 3.** One or more inputs to valuation techniques are significant and unobservable.

The fair values for substantially all of the Bank's financial assets and financial liabilities are based on observable prices and inputs and are classified in levels 1 and 2 of the fair value hierarchy. Certain level 2 and level 3 financial assets and financial liabilities may require appropriate valuation adjustments that a market participant would require to arrive at fair value for factors such as counterparty and the Bank or its affiliates' credit quality, funding risk, transfer restrictions, liquidity and bid/offer spreads. Valuation adjustments are generally based on market evidence.

See Notes 6 through 8 for further information about fair value measurements of cash instruments, derivatives and other financial assets and financial liabilities accounted for at fair value primarily under the fair value option (including information about unrealized gains and losses related to level 3 financial assets and financial liabilities, and transfers in and out of level 3), respectively.

The table below presents financial assets and financial liabilities accounted for at fair value under the fair value option or in accordance with other U.S. GAAP. Counterparty and cash collateral netting represents the impact on derivatives of netting across levels of the fair value hierarchy. Netting among positions classified in the same level is included in that level.

	As of	
	June 2016	December 2015
<i>\$ in millions</i>		
Total level 1 financial assets	\$ 4,033	\$ 5,268
Total level 2 financial assets	89,603	82,266
Total level 3 financial assets	2,888	2,430
Investments in funds at NAV	17	17
Counterparty and cash collateral netting	(59,268)	(52,355)
<b>Total financial assets at fair value</b>	<b>\$ 37,273</b>	<b>\$ 37,626</b>
Total assets	\$ 160,673	\$ 134,502
Total level 3 financial assets as a:		
Percentage of total assets	1.8%	1.8%
Percentage of total financial assets at fair value	7.7%	6.5%
Total level 1 financial liabilities	\$ 1,651	\$ 2,233
Total level 2 financial liabilities	48,061	45,831
Total level 3 financial liabilities	3,816	3,307
Counterparty and cash collateral netting	(34,351)	(30,269)
<b>Total financial liabilities at fair value</b>	<b>\$ 19,177</b>	<b>\$ 21,102</b>
Total level 3 financial liabilities as a percentage of total financial liabilities at fair value	19.9%	15.7%

### Note 6. Cash Instruments

Cash instruments include U.S. government and federal agency obligations, non-U.S. government and agency obligations, mortgage-backed loans and securities, bank loans and bridge loans, investments in funds at NAV, and other non-derivative financial instruments owned and financial instruments sold, but not yet purchased. See below for the types of cash instruments included in each level of the fair value hierarchy and the valuation techniques and significant inputs used to determine their fair values. See Note 5 for an overview of the Bank's fair value measurement policies.

#### Level 1 Cash Instruments

Level 1 cash instruments include certain U.S. government and federal agency obligations and most non-U.S. government and agency obligations. These instruments are valued using quoted prices for identical unrestricted instruments in active markets.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

The Bank defines active markets for debt instruments based on both the average daily trading volume and the number of days with trading activity.

### Level 2 Cash Instruments

Level 2 cash instruments include certain U.S. government and federal agency obligations, certain non-U.S. government and agency obligations, most mortgage-backed loans and securities, certain bank loans and bridge loans and certain lending commitments.

Valuations of level 2 cash instruments can be verified to quoted prices, recent trading activity for identical or similar instruments, broker or dealer quotations or alternative pricing sources with reasonable levels of price transparency. Consideration is given to the nature of the quotations (e.g., indicative or firm) and the relationship of recent market activity to the prices provided from alternative pricing sources.

Valuation adjustments are typically made to level 2 cash instruments (i) if the cash instrument is subject to transfer restrictions and/or (ii) for other premiums and liquidity discounts that a market participant would require to arrive at fair value. Valuation adjustments are generally based on market evidence.

### Level 3 Cash Instruments

Level 3 cash instruments have one or more significant valuation inputs that are not observable. Absent evidence to the contrary, level 3 cash instruments are initially valued at transaction price, which is considered to be the best initial estimate of fair value. Subsequently, the Bank uses other methodologies to determine fair value, which vary based on the type of instrument. Valuation inputs and assumptions are changed when corroborated by substantive observable evidence, including values realized on sales of financial assets.

### Valuation Techniques and Significant Inputs of Level 3 Cash Instruments

Valuation techniques of level 3 cash instruments vary by instrument, but are generally based on discounted cash flow techniques. The valuation techniques and the nature of significant inputs used to determine the fair values of each type of level 3 cash instrument are described below:

**Loans and Securities Backed by Commercial Real Estate.** Loans and securities backed by commercial real estate are directly or indirectly collateralized by a single commercial real estate property or a portfolio of properties, and may include tranches of varying levels of subordination. Significant inputs are generally determined based on relative value analyses and include:

- Transaction prices in both the underlying collateral and instruments with the same or similar underlying collateral and the basis, or price difference, to such prices;
- Market yields implied by transactions of similar or related assets and/or current levels and changes in market indices such as the CMBX (an index that tracks the performance of commercial mortgage bonds);
- A measure of expected future cash flows in a default scenario (recovery rates), implied by the value of the underlying collateral, which is mainly driven by current performance of the underlying collateral, capitalization rates and multiples. Recovery rates are expressed as a percentage of notional or face value of the instrument and reflect the benefit of credit enhancements on certain instruments; and
- Timing of expected future cash flows (duration) which, in certain cases, may incorporate the impact of other unobservable inputs (e.g., prepayment speeds).

**Loans and Securities Backed by Residential Real Estate.** Loans and securities backed by residential real estate are directly or indirectly collateralized by portfolios of residential real estate and may include tranches of varying levels of subordination. Significant inputs are generally determined based on relative value analyses, which incorporate comparisons to instruments with similar collateral and risk profiles. Significant inputs include:

- Transaction prices in both the underlying collateral and instruments with the same or similar underlying collateral;
- Market yields implied by transactions of similar or related assets;
- Cumulative loss expectations, driven by default rates, home price projections, residential property liquidation timelines, related costs and subsequent recoveries; and
- Duration, driven by underlying loan prepayment speeds and residential property liquidation timelines.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

**Bank Loans and Bridge Loans.** Significant inputs are generally determined based on relative value analyses, which incorporate comparisons both to prices of credit default swaps that reference the same or similar underlying instrument or entity and to other debt instruments for the same issuer for which observable prices or broker quotations are available. Significant inputs include:

- Market yields implied by transactions of similar or related assets and/or current levels and trends of market indices such as CDX and LCDX (indices that track the performance of corporate credit and loans, respectively);
- Current performance and recovery assumptions and, where the Bank uses credit default swaps to value the related cash instrument, the cost of borrowing the underlying reference obligation; and
- Duration.

**Other Debt Obligations.** Significant inputs are generally determined based on relative value analyses, which incorporate comparisons both to prices of credit default swaps that reference the same or similar underlying instrument or entity and to other debt instruments for the same issuer for which observable prices or broker quotations are available. Significant inputs include:

- Market yields implied by transactions of similar or related assets and/or current levels and trends of market indices such as CDX and LCDX;
- Current performance and recovery assumptions and, where the Bank uses credit default swaps to value the related cash instrument, the cost of borrowing the underlying reference obligation; and
- Duration.

**Equities.** Equities primarily relates to equity investments made as part of the Bank's Community Reinvestment Act (CRA) activities. Recent third-party completed or pending transactions (e.g., merger proposals, tender offers, debt restructurings) are considered to be the best evidence for any change in fair value. When these are not available, the following valuation methodologies are used, as appropriate:

- Transactions in similar instruments; and
- Discounted cash flow techniques.

The Bank also considers changes in the outlook for the relevant industry and financial performance of the issuer as compared to projected performance. Significant inputs include:

- Market and transaction multiples;
- Discount rates, long-term growth rates, earnings compound annual growth rates and capitalization rates; and
- For equity instruments with debt-like features, market yields implied by transactions of similar or related assets, current performance and recovery assumptions, and duration.

### Fair Value of Cash Instruments by Level

The tables below present cash instrument assets and liabilities at fair value by level within the fair value hierarchy. In the tables below:

- Cash instrument assets and liabilities are included in "Financial instruments owned, at fair value" and "Financial instruments sold, but not yet purchased, at fair value," respectively.
- Cash instrument assets are shown as positive amounts and cash instrument liabilities are shown as negative amounts.
- Other cash instrument assets primarily consist of other debt obligations and equities.

\$ in millions	As of June 2016			
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
U.S. government and federal agency obligations	\$ 3,881	\$ 8,209	\$ -	\$ 12,090
Non-U.S. government and agency obligations	152	-	-	152
Loans and securities backed by:				
Commercial real estate	-	336	174	510
Residential real estate	-	6,364	-	6,364
Bank loans and bridge loans	-	1,552	376	1,928
Other	-	198	312	510
Subtotal	\$ 4,033	\$ 16,659	\$ 862	\$ 21,554
Investments in funds at NAV	-	-	-	17
<b>Total cash instrument assets</b>				<b>\$ 21,571</b>
<b>Liabilities</b>				
U.S. government and federal agency obligations	\$ (1,650)	\$ -	\$ -	\$ (1,650)
Non-U.S. government and agency obligations	(1)	(5)	-	(6)
Loans and securities backed by:				
commercial real estate	-	-	(1)	(1)
Bank loans and bridge loans	-	(222)	(44)	(266)
Other	-	(7)	(1)	(8)
<b>Total cash instrument liabilities</b>	<b>\$ (1,651)</b>	<b>\$ (234)</b>	<b>\$ (46)</b>	<b>\$ (1,931)</b>

## Notes to Condensed Consolidated Financial Statements (Unaudited)

\$ in millions	As of December 2015			
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
U.S. government and federal				
agency obligations	\$ 5,086	\$ 9,621	\$ –	\$ 14,707
Non-U.S. government and				
agency obligations	182	52	–	234
Loans and securities backed by:				
Commercial real estate	–	1,370	140	1,510
Residential real estate	–	5,955	35	5,990
Bank loans and bridge loans	–	2,371	457	2,828
Other	–	305	196	501
Subtotal	\$ 5,268	\$ 19,674	\$ 828	\$ 25,770
Investments in funds at NAV				17
Total cash instrument assets				\$ 25,787
<b>Liabilities</b>				
U.S. government and federal				
agency obligations	\$ (2,232)	\$ –	\$ –	\$ (2,232)
Non-U.S. government and				
agency obligations	(1)	(5)	–	(6)
Loans and securities backed by:				
Commercial real estate	–	(1)	–	(1)
Residential real estate	–	(2)	–	(2)
Bank loans and bridge loans	–	(173)	(97)	(270)
Other	–	(22)	–	(22)
Total cash instrument liabilities	\$ (2,233)	\$ (203)	\$ (97)	\$ (2,533)

### Significant Unobservable Inputs

The table below presents the amount of level 3 assets, and ranges and weighted averages of significant unobservable inputs used to value the Bank's level 3 cash instruments.

\$ in millions	Level 3 Assets and Range of Significant Unobservable Inputs (Weighted Average) as of	
	June 2016	December 2015
<b>Loans and securities backed</b>		
by commercial real estate	\$174	\$140
Yield	3.1% to 8.4% (5.2%)	3.5% to 9.6% (5.4%)
Duration (years)	N.M.	N.M.
<b>Loans and securities backed</b>		
by residential real estate	\$–	\$35
Yield	N.M.	N.M.
Duration (years)	N.M.	N.M.
<b>Bank loans and</b>		
bridge loans	\$376	\$457
Yield	1.5% to 11.7% (4.4%)	1.9% to 36.6% (5.7%)
Recovery rate	40.0% to 85.0% (69.7%)	40.0% to 75.0% (61.7%)
Duration (years)	1.6 to 3.5 (2.4)	0.7 to 3.4 (2.3)
<b>Other</b>		
	\$312	\$196
Yield	3.7% to 19.0% (14.0%)	5.7% to 16.3% (10.7%)
Recovery rate	86.1% to 90.7% (87.3%)	N.M.
Duration (years)	1.1 to 1.6 (1.5)	N.M.

In the table above:

- Ranges represent the significant unobservable inputs that were used in the valuation of each type of cash instrument.
- Weighted averages are calculated by weighting each input by the relative fair value of the cash instruments.
- The ranges and weighted averages of these inputs are not representative of the appropriate inputs to use when calculating the fair value of any one cash instrument. For example, the highest recovery rate for bank loans and bridge loans is appropriate for valuing a specific loan but may not be appropriate for valuing any other bank loans or bridge loans. Accordingly, the ranges of inputs do not represent uncertainty in, or possible ranges of, fair value measurements of the Bank's level 3 cash instruments. Significant unobservable input types which are only relevant to a single instrument are not meaningful and therefore have been excluded.
- Increases in yield or duration used in the valuation of the Bank's level 3 cash instruments would result in a lower fair value measurement, while an increase in recovery rate would result in a higher fair value measurement. Due to the distinctive nature of each of the Bank's level 3 cash instruments, the interrelationship of inputs is not necessarily uniform within each product type.
- Loans and securities backed by commercial and residential real estate, bank loans and bridge loans and other cash instruments, which primarily consist of other debt obligations and equities, are valued using discounted cash flows.

### Transfers Between Levels of the Fair Value Hierarchy

Transfers between levels of the fair value hierarchy are reported at the beginning of the reporting period in which they occur. There were no transfers between level 1 and level 2 cash instrument assets or liabilities during the six months ended June 2016 and June 2015.

See "Level 3 Rollforward" below for information about transfers between level 2 and level 3.



## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Level 3 Rollforward

The table below presents changes in fair value for all cash instrument assets and liabilities categorized as level 3 as of the end of the period. In the table below:

- If a cash instrument asset or liability was transferred to level 3 during a reporting period, its entire gain or loss for the period is included in level 3. For level 3 cash instrument assets, increases are shown as positive amounts, while decreases are shown as negative amounts. For level 3 cash instrument liabilities, increases are shown as negative amounts, while decreases are shown as positive amounts.
- Level 3 cash instruments are frequently economically hedged with level 1 and level 2 cash instruments and/or level 1, level 2 or level 3 derivatives. Accordingly, gains or losses that are reported in level 3 can be partially offset by gains or losses attributable to level 1 or level 2 cash instruments and/or level 1, level 2 or level 3 derivatives. As a result, gains or losses included in the level 3 rollforward below do not necessarily represent the overall impact on the Bank's results of operations, liquidity or capital resources.

- Purchases include both originations and secondary market purchases.
- Net unrealized gains/(losses) relate to instruments that were still held at period-end.
- For the six months ended June 2016, the net realized and unrealized gains on level 3 cash instrument assets of \$22 million (reflecting \$12 million of realized gains and \$10 million of unrealized gains) were reported in "Gains and losses from financial instruments, net."
- For the six months ended June 2015, the net realized and unrealized gains on level 3 cash instrument assets of \$72 million (reflecting \$36 million of realized gains and \$36 million of unrealized gains) were reported in "Gains and losses from financial instruments, net."

See "Level 3 Rollforward Commentary" below for an explanation of the net unrealized gains/(losses) on level 3 cash instruments and the activity related to transfers into and out of level 3.

Level 3 Cash Instrument Assets and Liabilities at Fair Value

\$ in millions	Balance, beginning of period	Net realized gains	Net unrealized gains/ (losses)	Purchases	Sales	Settlements	Transfers into level 3	Transfers out of level 3	Balance, end of period
<b>Six Months Ended June 2016</b>									
Loans and securities backed by:									
Commercial real estate	\$ 140	\$ 2	\$ 5	\$ 87	\$ -	\$ (25)	\$ -	\$ (35)	\$ 174
Residential real estate	35	-	-	1	-	(36)	-	-	-
Bank loans and bridge loans	457	6	4	61	(49)	(101)	74	(76)	376
Other <sup>1</sup>	196	4	1	121	-	(10)	-	-	312
<b>Total cash instrument assets</b>	<b>\$ 828</b>	<b>\$ 12</b>	<b>\$ 10</b>	<b>\$ 270</b>	<b>\$ (49)</b>	<b>\$ (172)</b>	<b>\$ 74</b>	<b>\$ (111)</b>	<b>\$ 862</b>
<b>Total cash instrument liabilities</b>	<b>\$ (97)</b>	<b>\$ -</b>	<b>\$ 21</b>	<b>\$ 39</b>	<b>\$ (1)</b>	<b>\$ (7)</b>	<b>\$ (1)</b>	<b>\$ -</b>	<b>\$ (46)</b>

### Six Months Ended June 2015

Loans and securities backed by:

Commercial real estate	\$ 584	\$ 3	\$ 1	\$ 14	\$ (63)	\$ (335)	\$ 5	\$ (75)	\$ 134
Residential real estate	47	2	1	1	(2)	(4)	-	(1)	44
Bank loans and bridge loans	2,165	29	44	193	(500)	(525)	143	(167)	1,382
Other <sup>1</sup>	295	2	(10)	141	-	(24)	12	(100)	316
<b>Total cash instrument assets</b>	<b>\$ 3,091</b>	<b>\$ 36</b>	<b>\$ 36</b>	<b>\$ 349</b>	<b>\$ (565)</b>	<b>\$ (888)</b>	<b>\$ 160</b>	<b>\$ (343)</b>	<b>\$ 1,876</b>
<b>Total cash instrument liabilities</b>	<b>\$ (123)</b>	<b>\$ 1</b>	<b>\$ (2)</b>	<b>\$ 42</b>	<b>\$ (4)</b>	<b>\$ (2)</b>	<b>\$ -</b>	<b>\$ 18</b>	<b>\$ (70)</b>

1. Primarily consists of other debt obligations and equities.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Level 3 Rollforward Commentary

**Six Months Ended June 2016.** Transfers into level 3 during the six months ended June 2016 reflected transfers of certain bank loans and bridge loans from level 2 principally due to reduced price transparency as a result of a lack of market evidence, including fewer transactions in these instruments.

Transfers out of level 3 during the six months ended June 2016 primarily reflected transfers of certain bank loans and bridge loans and certain loans and securities backed by commercial real estate to level 2 principally due to increased price transparency as a result of market evidence, including market transactions in these instruments.

The net unrealized gain on level 3 cash instruments for the six months ended June 2016 was not material.

**Six Months Ended June 2015.** Transfers into level 3 during the six months ended June 2015 primarily reflected transfers of certain bank loans and bridge loans from level 2 principally due to reduced price transparency as a result of a lack of market evidence, including fewer transactions in these instruments.

Transfers out of level 3 during six months ended June 2015 primarily reflected transfers of certain bank loans and bridge loans and other debt obligations to level 2 principally due to increased price transparency as a result of market evidence, including market transactions in these or similar instruments and due to certain unobservable yield and duration inputs not being significant to the valuation of these instruments.

The net unrealized gain on level 3 cash instruments for the six months ended June 2015 was not material.

### Note 7.

#### Derivatives and Hedging Activities

##### Derivative Activities

Derivatives are instruments that derive their value from underlying asset prices, indices, reference rates and other inputs, or a combination of these factors. Derivatives may be traded on an exchange (exchange-traded) or they may be privately negotiated contracts, which are usually referred to as over-the-counter (OTC) derivatives. Certain of the Bank's OTC derivatives are cleared and settled through central clearing counterparties (OTC-cleared), while others are bilateral contracts between two counterparties (bilateral OTC).

**Market-Making.** As a market maker, the Bank enters into derivative transactions to provide liquidity to clients and to facilitate the transfer and hedging of their risks. In this capacity, the Bank typically acts as principal and is required to commit capital to provide execution. As a market maker, it is essential to maintain an inventory of financial instruments sufficient to meet expected client and market demands.

**Risk Management.** The Bank also enters into derivatives to actively manage risk exposures that arise from its market-making and lending activities in derivative and cash instruments. The Bank's holdings and exposures are hedged, in many cases, on either a portfolio or risk-specific basis, as opposed to an instrument-by-instrument basis. In addition, the Bank may enter into derivatives designated as hedges under U.S. GAAP. These derivatives are used to manage interest rate exposure in certain fixed-rate deposits.

The Bank enters into various types of derivatives, including:

- **Futures and Forwards.** Contracts that commit counterparties to purchase or sell financial instruments or currencies in the future.
- **Swaps.** Contracts that require counterparties to exchange cash flows such as currency or interest payment streams. The amounts exchanged are based on the specific terms of the contract with reference to specified rates, financial instruments, currencies or indices.
- **Options.** Contracts in which the option purchaser has the right, but not the obligation, to purchase from or sell to the option writer financial instruments or currencies within a defined time period for a specified price.

Derivatives are reported on a net-by-counterparty basis (i.e., the net payable or receivable for derivative assets and liabilities for a given counterparty) when a legal right of setoff exists under an enforceable netting agreement (counterparty netting). Derivatives are accounted for at fair value, net of cash collateral received or posted under enforceable credit support agreements (cash collateral netting). Derivative assets and liabilities are included in "Financial instruments owned, at fair value" and "Financial instruments sold, but not yet purchased, at fair value," respectively. Realized and unrealized gains and losses on derivatives not designated as hedges under ASC 815 are included in "Gains and losses from financial instruments, net" in Note 4.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

The table below presents the gross fair value and the notional amount of derivative contracts by major product type, the amounts of counterparty and cash collateral netting in the condensed consolidated statements of financial condition, as well as cash and securities collateral posted and received under enforceable credit support agreements that do not meet the criteria for netting under U.S. GAAP. In the table below:

- Gross fair values exclude the effects of both counterparty netting and collateral, and therefore are not representative of the Bank's exposure.
- Where the Bank has received or posted collateral under credit support agreements, but has not yet determined such agreements are enforceable, the related collateral has not been netted.
- Notional amounts, which represent the sum of gross long and short derivative contracts, provide an indication of the volume of the Bank's derivative activity and do not represent anticipated losses.
- Total gross fair value of derivatives includes derivative assets and derivative liabilities of \$5.31 billion and \$2.20 billion, respectively, as of June 2016, and derivative assets and derivative liabilities of \$4.11 billion and \$1.71 billion, respectively, as of December 2015, which are not subject to an enforceable netting agreement or are subject to a netting agreement that the Bank has not yet determined to be enforceable.

\$ in millions	As of June 2016			As of December 2015		
	Derivative Assets	Derivative Liabilities	Notional Amount	Derivative Assets	Derivative Liabilities	Notional Amount
<b>Derivatives not accounted for as hedges</b>						
Exchange-traded	\$ 425	\$ 501	\$ 4,092,769	\$ 302	\$ 262	\$ 3,918,183
OTC-cleared	246,627	226,395	12,665,861	150,879	129,689	13,074,682
Bilateral OTC	770,026	759,707	22,162,839	514,507	506,378	21,927,828
<b>Total interest rates</b>	<b>1,017,078</b>	<b>986,603</b>	<b>38,921,469</b>	<b>665,688</b>	<b>636,329</b>	<b>38,920,693</b>
<b>Currencies – Bilateral OTC</b>	<b>71,349</b>	<b>71,315</b>	<b>2,219,439</b>	<b>57,839</b>	<b>61,645</b>	<b>2,058,533</b>
<b>Credit – Bilateral OTC</b>	<b>3,150</b>	<b>2,609</b>	<b>153,789</b>	<b>3,422</b>	<b>2,661</b>	<b>164,005</b>
<b>Equities – Bilateral OTC</b>	<b>1,266</b>	<b>837</b>	<b>65,275</b>	<b>960</b>	<b>709</b>	<b>75,110</b>
<b>Commodities – Bilateral OTC</b>	<b>107</b>	<b>105</b>	<b>12,276</b>	<b>153</b>	<b>150</b>	<b>7,128</b>
<b>Subtotal</b>	<b>1,092,950</b>	<b>1,061,469</b>	<b>41,372,248</b>	<b>728,062</b>	<b>701,494</b>	<b>41,225,469</b>
<b>Derivatives accounted for as hedges</b>						
OTC-cleared	671	–	24,831	205	21	22,585
Bilateral OTC	203	–	3,771	173	2	3,981
<b>Total interest rates</b>	<b>874</b>	<b>–</b>	<b>28,602</b>	<b>378</b>	<b>23</b>	<b>26,566</b>
<b>Total gross fair value/notional amount of derivatives</b>	<b>\$ 1,093,824</b>	<b>\$ 1,061,469</b>	<b>\$ 41,400,850</b>	<b>\$ 728,440</b>	<b>\$ 701,517</b>	<b>\$ 41,252,035</b>
<b>Amounts that have been offset in the condensed consolidated statements of financial condition</b>						
OTC-cleared	\$ (224,646)	\$ (224,646)		\$ (126,875)	\$ (126,875)	
Bilateral OTC	(797,215)	(797,215)		(539,394)	(539,394)	
<b>Total counterparty netting</b>	<b>(1,021,861)</b>	<b>(1,021,861)</b>		<b>(666,269)</b>	<b>(666,269)</b>	
OTC-cleared	(22,652)	(1,675)		(24,108)	(2,741)	
Bilateral OTC	(35,724)	(31,784)		(27,249)	(26,530)	
<b>Total cash collateral netting</b>	<b>(58,376)</b>	<b>(33,459)</b>		<b>(51,357)</b>	<b>(29,271)</b>	
<b>Total counterparty and cash collateral netting</b>	<b>(1,080,237)</b>	<b>(1,055,320)</b>		<b>(717,626)</b>	<b>(695,540)</b>	
<b>Amounts included in the condensed consolidated statements of financial condition</b>						
Exchange-traded	\$ 425	\$ 501		\$ 302	\$ 262	
OTC-cleared	–	74		101	94	
Bilateral OTC	13,162	5,574		10,411	5,621	
<b>Total amounts included in the condensed consolidated statements of financial condition</b>	<b>\$ 13,587</b>	<b>\$ 6,149</b>		<b>\$ 10,814</b>	<b>\$ 5,977</b>	
<b>Amounts that have not been offset in the condensed consolidated statements of financial condition</b>						
Cash collateral received/posted	\$ (133)	\$ (630)		\$ (362)	\$ (781)	
Securities collateral received/posted	(3,082)	(358)		(1,726)	(614)	
<b>Total</b>	<b>\$ 10,372</b>	<b>\$ 5,161</b>		<b>\$ 8,726</b>	<b>\$ 4,582</b>	

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Valuation Techniques for Derivatives

The Bank's level 2 and level 3 derivatives are valued using derivative pricing models (e.g., discounted cash flow models, correlation models, and models that incorporate option pricing methodologies, such as Monte Carlo simulations). Price transparency of derivatives can generally be characterized by product type, as described below.

- **Interest Rate.** In general, the key inputs used to value interest rate derivatives are transparent, even for most long-dated contracts. Interest rate swaps and options denominated in the currencies of leading industrialized nations are characterized by high trading volumes and tight bid/offer spreads. Interest rate derivatives that reference indices, such as an inflation index, or the shape of the yield curve (e.g., 10-year swap rate vs. 2-year swap rate) are more complex, but the key inputs are generally observable.
- **Currency.** Prices for currency derivatives based on the exchange rates of leading industrialized nations, including those with longer tenors, are generally transparent. The primary difference between the price transparency of developed and emerging market currency derivatives is that emerging markets tend to be observable for contracts with shorter tenors.
- **Credit.** Price transparency for credit default swaps, including both single names and baskets of credits, varies by market and underlying reference entity or obligation. Credit default swaps that reference indices, large corporates and major sovereigns generally exhibit the most price transparency. For credit default swaps with other underliers, price transparency varies based on credit rating, the cost of borrowing the underlying reference obligations, and the availability of the underlying reference obligations for delivery upon the default of the issuer. Credit default swaps that reference loans, asset-backed securities and emerging market debt instruments tend to have less price transparency than those that reference corporate bonds. In addition, more complex credit derivatives, such as those sensitive to the correlation between two or more underlying reference obligations, generally have less price transparency.

- **Equity.** Price transparency for equity derivatives varies by market and underlier. Options on indices and the common stock of corporates included in major equity indices exhibit the most price transparency. Equity derivatives generally have observable market prices, except for contracts with long tenors or reference prices that differ significantly from current market prices. More complex equity derivatives, such as those sensitive to the correlation between two or more individual stocks, generally have less price transparency.

Liquidity is essential to observability of all product types. If transaction volumes decline, previously transparent prices and other inputs may become unobservable. Conversely, even highly structured products may at times have trading volumes large enough to provide observability of prices and other inputs. See Note 5 for an overview of the Bank's fair value measurement policies.

### Level 1 Derivatives

Level 1 derivatives include short-term contracts for future delivery of securities when the underlying security is a level 1 instrument, and exchange-traded derivatives if they are actively traded and are valued at their quoted market price. As of both June 2016 and December 2015, the Bank had no level 1 derivatives.

### Level 2 Derivatives

Level 2 derivatives include OTC derivatives for which all significant valuation inputs are corroborated by market evidence and exchange-traded derivatives that are not actively traded and/or that are valued using models that calibrate to market-clearing levels of OTC derivatives. In evaluating the significance of a valuation input, the Bank considers, among other factors, a portfolio's net risk exposure to that input.

The selection of a particular model to value a derivative depends on the contractual terms of and specific risks inherent in the instrument, as well as the availability of pricing information in the market. For derivatives that trade in liquid markets, model selection does not involve significant management judgment because outputs of models can be calibrated to market-clearing levels.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

Valuation models require a variety of inputs, such as contractual terms, market prices, yield curves, discount rates (including those derived from interest rates on collateral received and posted as specified in credit support agreements for collateralized derivatives), credit curves, measures of volatility, prepayment rates, loss severity rates and correlations of such inputs. Significant inputs to the valuations of level 2 derivatives can be verified to market transactions, broker or dealer quotations or other alternative pricing sources with reasonable levels of price transparency. Consideration is given to the nature of the quotations (e.g., indicative or firm) and the relationship of recent market activity to the prices provided from alternative pricing sources.

### Level 3 Derivatives

Level 3 derivatives are valued using models which utilize observable level 1 and/or level 2 inputs, as well as unobservable level 3 inputs. The significant unobservable inputs used to value the Bank's level 3 derivatives are described below.

- For the majority of the Bank's interest rate and currency derivatives classified within level 3, significant unobservable inputs include correlations of certain currencies and interest rates (e.g., the correlation between Euro inflation and Euro interest rates) and specific interest rate volatilities.
- For level 3 credit derivatives, significant unobservable inputs include illiquid credit spreads, which are unique to specific reference obligations and reference entities.
- For level 3 equity derivatives, significant unobservable inputs generally include correlation inputs, such as the correlation of the price performance of two or more individual stocks or the correlation of the price performance for a basket of stocks to another asset class such as commodities.

Subsequent to the initial valuation of a level 3 derivative, the Bank updates the level 1 and level 2 inputs to reflect observable market changes and any resulting gains and losses are recorded in level 3. Level 3 inputs are changed when corroborated by evidence such as similar market transactions, third-party pricing services and/or broker or dealer quotations or other empirical market data. In circumstances where the Bank cannot verify the model value by reference to market transactions, it is possible that a different valuation model could produce a materially different estimate of fair value.

See below for further information about significant unobservable inputs used in the valuation of level 3 derivatives.

### Valuation Adjustments

Valuation adjustments are integral to determining the fair value of derivative portfolios and are used to adjust the mid-market valuations produced by derivative pricing models, to the appropriate exit price valuation. These adjustments incorporate bid/offer spreads, the cost of liquidity, credit valuation adjustments and funding valuation adjustments, which account for the credit and funding risk inherent in the uncollateralized portion of derivative portfolios. The Bank also makes funding valuation adjustments to collateralized derivatives where the terms of the agreement do not permit the Bank to deliver or repledge collateral received. Market-based inputs are generally used when calibrating valuation adjustments to market-clearing levels.

In addition, for derivatives that include significant unobservable inputs, the Bank makes model or exit price adjustments to account for the valuation uncertainty present in the transaction.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Fair Value of Derivatives by Level

The tables below present the fair value of derivatives on a gross basis by level and major product type as well as the impact of netting included in the condensed consolidated statements of financial condition.

\$ in millions	As of June 2016			
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Interest rates	\$ -	\$ 1,017,032	\$ 920	\$ 1,017,952
Currencies	-	70,948	401	71,349
Credit	-	1,870	1,280	3,150
Equities	-	847	419	1,266
Commodities	-	96	11	107
Gross fair value	-	1,090,793	3,031	1,093,824
Counterparty netting				
within levels	-	(1,019,964)	(1,005)	(1,020,969)
Subtotal	-	70,829	2,026	72,855
Cross-level counterparty netting				(892)
Cash collateral netting				(58,376)
<b>Net fair value</b>				<b>\$ 13,587</b>
<b>Liabilities</b>				
Interest rates	\$ -	\$ (985,666)	\$ (937)	\$ (986,603)
Currencies	-	(71,055)	(260)	(71,315)
Credit	-	(1,977)	(632)	(2,609)
Equities	-	(836)	(1)	(837)
Commodities	-	(96)	(9)	(105)
Gross fair value	-	(1,059,630)	(1,839)	(1,061,469)
Counterparty netting				
within levels	-	1,019,964	1,005	1,020,969
Subtotal	-	(39,666)	(834)	(40,500)
Cross-level counterparty netting				892
Cash collateral netting				33,459
<b>Net fair value</b>				<b>\$ (6,149)</b>

\$ in millions	As of December 2015			
	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Interest rates	\$ -	\$ 665,659	\$ 407	\$ 666,066
Currencies	-	57,452	387	57,839
Credit	-	1,905	1,517	3,422
Equities	-	709	251	960
Commodities	-	136	17	153
Gross fair value	-	725,861	2,579	728,440
Counterparty netting				
within levels	-	(664,294)	(977)	(665,271)
Subtotal	-	61,567	1,602	63,169
Cross-level counterparty netting				(998)
Cash collateral netting				(51,357)
<b>Net fair value</b>				<b>\$ 10,814</b>
<b>Liabilities</b>				
Interest rates	\$ -	\$ (635,313)	\$ (1,039)	\$ (636,352)
Currencies	-	(61,493)	(152)	(61,645)
Credit	-	(1,904)	(757)	(2,661)
Equities	-	(706)	(3)	(709)
Commodities	-	(135)	(15)	(150)
Gross fair value	-	(699,551)	(1,966)	(701,517)
Counterparty netting				
within levels	-	664,294	977	665,271
Subtotal	-	(35,257)	(989)	(36,246)
Cross-level counterparty netting				998
Cash collateral netting				29,271
<b>Net fair value</b>				<b>\$ (5,977)</b>

In the tables above:

- The gross fair values exclude the effects of both counterparty netting and collateral netting, and therefore are not representative of the Bank's exposure.
- Counterparty netting is reflected in each level to the extent that receivable and payable balances are netted within the same level and is included in Counterparty netting within levels. Where the counterparty netting is across levels, the netting is reflected in Cross-level counterparty netting.
- Derivative assets are shown as positive amounts and derivative liabilities are shown as negative amounts.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Significant Unobservable Inputs

The table below presents the amount of level 3 assets (liabilities), and ranges, averages and medians of significant unobservable inputs used to value substantially all of the Bank's level 3 derivatives.

\$ in millions	Level 3 Assets (Liabilities) and Range of Significant Unobservable Inputs (Average / Median) as of	
	June 2016	December 2015
<b>Interest rates</b>	<b>\$(17)</b>	<b>\$(632)</b>
Correlation	(10%) to 86% (56% / 60%)	(25%) to 92% (53% / 55%)
Volatility (bps per annum)	31 to 151 (84 / 57) <sup>†</sup>	31 to 152 (84 / 57) <sup>†</sup>
<b>Currencies</b>	<b>\$141</b>	<b>\$235</b>
Correlation	25% to 70% (50% / 51%)	25% to 70% (50% / 51%)
<b>Credit</b>	<b>\$648</b>	<b>\$760</b>
Credit spreads (bps)	31 to 800 (230 / 157) <sup>†</sup>	39 to 1,019 (223 / 142) <sup>†</sup>
<b>Equities</b>	<b>\$418</b>	<b>\$248</b>
Correlation	25% to 86% (48% / 47%)	27% to 88% (50% / 50%)

1. The difference between the average and the median for these spread inputs indicates that the majority of the inputs fall in the lower end of the range.

In the table above:

- Ranges represent the significant unobservable inputs that were used in the valuation of each type of derivative.
  - Averages represent the arithmetic average of the inputs and are not weighted by the relative fair value or notional of the respective financial instruments. An average greater than the median indicates that the majority of inputs are below the average.
  - The ranges, averages and medians of these inputs are not representative of the appropriate inputs to use when calculating the fair value of any one derivative. For example, the highest correlation for interest rate derivatives is appropriate for valuing a specific interest rate derivative but may not be appropriate for valuing any other interest rate derivative. Accordingly, the ranges of inputs do not represent uncertainty in, or possible ranges of, fair value measurements of the Bank's level 3 derivatives.
  - Interest rates, currencies and equities derivatives are valued using option pricing models, and credit derivatives are valued using option pricing and discounted cash flow models.
  - The fair value of any one instrument may be determined using multiple valuation techniques. For example, option pricing models and discounted cash flows models are typically used together to determine fair value. Therefore, the level 3 balance encompasses both of these techniques.
- Correlation within currencies and equities includes cross-product correlation.
  - Derivative assets are shown as positive amounts and derivative liabilities are shown as negative amounts.

### Range of Significant Unobservable Inputs

The following is information about the ranges of significant unobservable inputs used to value the Bank's level 3 derivative instruments:

- **Correlation.** Ranges for correlation cover a variety of underliers both within one market (e.g., foreign exchange rates) and across markets (e.g., correlation of an interest rate and a foreign exchange rate), as well as across regions. Generally, cross-product correlation inputs are used to value more complex instruments and are lower than correlation inputs on assets within the same derivative product type.
  - **Volatility.** Ranges for volatility cover numerous underliers across a variety of markets, maturities and strike prices.
  - **Credit spreads.** The ranges for credit spreads cover a variety of underliers (index and single names), regions, sectors, maturities and credit qualities (high-yield and investment-grade). The broad range of this population gives rise to the width of the ranges of significant unobservable inputs.
- ### Sensitivity of Fair Value Measurement to Changes in Significant Unobservable Inputs
- The following is a description of the directional sensitivity of the Bank's level 3 fair value measurements to changes in significant unobservable inputs, in isolation:
- **Correlation.** In general, for contracts where the holder benefits from the convergence of the underlying asset or index prices (e.g., interest rates and foreign exchange rates), an increase in correlation results in a higher fair value measurement.
  - **Volatility.** In general, for purchased options an increase in volatility results in a higher fair value measurement.
  - **Credit spreads.** In general, the fair value of purchased credit protection increases as credit spreads increase. Credit spreads are strongly related to distinctive risk factors of the underlying reference obligations, which include reference entity-specific factors such as leverage, volatility and industry, market-based risk factors, such as borrowing costs or liquidity of the underlying reference obligation, and macroeconomic conditions.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

Due to the distinctive nature of each of the Bank's level 3 derivatives, the interrelationship of inputs is not necessarily uniform within each product type.

### Level 3 Rollforward

The table below presents changes in fair value for all derivatives categorized as level 3 as of the end of the period. In the table below:

- If a derivative was transferred to level 3 during a reporting period, its entire gain or loss for the period is included in level 3. Transfers between levels are reported at the beginning of the reporting period in which they occur.
- Positive amounts for transfers into level 3 and negative amounts for transfers out of level 3 represent net transfers of derivative assets. Negative amounts for transfers into level 3 and positive amounts for transfers out of level 3 represent net transfers of derivative liabilities.
- A derivative with level 1 and/or level 2 inputs is classified in level 3 in its entirety if it has at least one significant level 3 input.
- If there is one significant level 3 input, the entire gain or loss from adjusting only observable inputs (i.e., level 1 and level 2 inputs) is classified as level 3.

- Gains or losses that have been reported in level 3 resulting from changes in level 1 or level 2 inputs are frequently offset by gains or losses attributable to level 1 or level 2 derivatives and/or level 1, level 2 and level 3 cash instruments. As a result, gains/(losses) included in the level 3 rollforward below do not necessarily represent the overall impact on the Bank's results of operations, liquidity or capital resources.

- Net unrealized gains/(losses) relate to instruments that were still held at period-end.
- For the six months ended June 2016, the net realized and unrealized losses on level 3 derivative assets and liabilities of \$81 million (reflecting \$72 million of realized losses and \$9 million of unrealized losses) were reported in "Gains and losses from financial instruments, net."
- For the six months ended June 2015, the net realized and unrealized gains on level 3 derivative assets and liabilities of \$116 million (reflecting \$84 million of realized losses and \$200 million of unrealized gains) were reported in "Gains and losses from financial instruments, net."

See "Level 3 Rollforward Commentary" below for an explanation of the net unrealized gains/(losses) on level 3 derivative assets and liabilities and the activity related to transfers into and out of level 3.

Level 3 Derivative Assets and Liabilities at Fair Value

<i>\$ in millions</i>	Asset/ (liability) balance, beginning of period	Net realized gains/ (losses)	Net unrealized gains/ (losses)	Purchases	Sales	Settlements	Transfers into level 3	Transfers out of level 3	Asset/ (liability) balance, end of period
<b>Six Months Ended June 2016</b>									
Interest rates – net	\$ (632)	\$ (15)	\$ 144	\$ 2	\$ (8)	\$ 30	\$ 235	\$ 227	\$ (17)
Currencies – net	235	(40)	(106)	22	(3)	28	–	5	141
Credit – net	760	(20)	(144)	5	(1)	25	37	(14)	648
Equities – net	248	3	97	84	–	(5)	–	(9)	418
Commodities – net	2	–	–	–	–	–	–	–	2
<b>Total derivatives – net</b>	<b>\$ 613</b>	<b>\$ (72)</b>	<b>\$ (9)</b>	<b>\$ 113</b>	<b>\$ (12)</b>	<b>\$ 78</b>	<b>\$ 272</b>	<b>\$ 209</b>	<b>\$ 1,192</b>
<b>Six Months Ended June 2015</b>									
Interest rates – net	\$ (224)	\$ (16)	\$ (3)	\$ 4	\$ (4)	\$ 10	\$ 32	\$ (37)	\$ (238)
Currencies – net	(41)	(54)	160	25	(9)	19	18	4	122
Credit – net	360	(17)	55	2	(20)	19	108	17	524
Equities – net	107	3	(12)	22	–	(5)	–	(8)	107
Commodities – net	2	–	–	–	–	–	–	–	2
<b>Total derivatives – net</b>	<b>\$ 204</b>	<b>\$ (84)</b>	<b>\$ 200</b>	<b>\$ 53</b>	<b>\$ (33)</b>	<b>\$ 43</b>	<b>\$ 158</b>	<b>\$ (24)</b>	<b>\$ 517</b>



## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Level 3 Rollforward Commentary

**Six Months Ended June 2016.** The net unrealized loss on level 3 derivatives of \$9 million for the six months ended June 2016 was primarily attributable to losses on credit derivatives from changes in certain foreign exchange rates and losses on currency derivatives from decreases in certain interest rates partially offset by gains on interest rate derivatives from changes to certain interest rates and gains on certain equity derivatives reflecting the impact of changes in equity prices.

Transfers into level 3 derivatives during the six months ended June 2016 primarily reflected transfers of certain interest rate derivative assets into level 3, primarily due to reduced transparency of certain unobservable inputs used to value these derivatives.

Transfers out of level 3 derivatives during the six months ended June 2016 primarily reflected transfer of certain interest rate derivative liabilities to level 2, principally due to increased transparency of interest rates used to value these derivatives.

**Six Months Ended June 2015.** The net unrealized gain on level 3 derivatives of \$200 million for the six months ended June 2015 was primarily attributable to gains on certain currency derivatives reflecting the impact of an increase in certain interest rates and changes in certain foreign exchange rates.

Transfers into level 3 derivatives during the six months ended June 2015 primarily reflected transfers of certain credit derivative assets into level 3, principally due to unobservable credit spread inputs becoming significant to the valuation of these derivatives.

Transfers out of level 3 derivatives during the six months ended June 2015 primarily reflected transfers of certain interest rate derivative assets to level 2, principally due to increased transparency of certain interest rate inputs used to value these derivatives.

### Credit Derivatives

The Bank enters into a broad array of credit derivatives in locations around the world to facilitate client transactions and to manage the credit risk associated with its businesses. Credit derivatives are individually negotiated contracts and can have various settlement and payment conventions. Credit events include failure to pay, bankruptcy, acceleration of indebtedness, restructuring, repudiation and dissolution of the reference entity.

The Bank enters into the following types of credit derivatives:

- **Credit Default Swaps.** Single-name credit default swaps protect the buyer against the loss of principal on one or more bonds, loans or mortgages (reference obligations) in the event the issuer (reference entity) of the reference obligations suffers a credit event. The buyer of protection pays an initial or periodic premium to the seller and receives protection for the period of the contract. If there is no credit event, as defined in the contract, the seller of protection makes no payments to the buyer of protection. However, if a credit event occurs, the seller of protection is required to make a payment to the buyer of protection, which is calculated in accordance with the terms of the contract.
- **Credit Options.** In a credit option, the option writer assumes the obligation to purchase or sell a reference obligation at a specified price or credit spread. The option purchaser buys the right, but does not assume the obligation, to sell the reference obligation to, or purchase it from, the option writer. The payments on credit options depend either on a particular credit spread or the price of the reference obligation.
- **Credit Indices, Baskets and Tranches.** Credit derivatives may reference a basket of single-name credit default swaps or a broad-based index. If a credit event occurs in one of the underlying reference obligations, the protection seller pays the protection buyer. The payment is typically a pro-rata portion of the transaction's total notional amount based on the underlying defaulted reference obligation. In certain transactions, the credit risk of a basket or index is separated into various portions (tranches), each having different levels of subordination. The most junior tranches cover initial defaults and once losses exceed the notional amount of these junior tranches, any excess loss is covered by the next most senior tranche in the capital structure.
- **Total Return Swaps.** A total return swap transfers the risks relating to economic performance of a reference obligation from the protection buyer to the protection seller. Typically, the protection buyer receives from the protection seller a floating rate of interest and protection against any reduction in fair value of the reference obligation, and in return the protection seller receives the cash flows associated with the reference obligation, plus any increase in the fair value of the reference obligation.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

The Bank economically hedges its exposure to written credit derivatives primarily by entering into offsetting purchased credit derivatives with identical underliers. Substantially all of the Bank's purchased credit derivative transactions are with financial institutions and are subject to stringent collateral thresholds. In addition, upon the occurrence of a specified trigger event, the Bank may take possession of the reference obligations underlying a particular written credit derivative, and consequently may, upon liquidation of the reference obligations, recover amounts on the underlying reference obligations in the event of default.

As of June 2016, written and purchased credit derivatives had total gross notional amounts of \$68.06 billion and \$85.73 billion, respectively, for total net notional purchased protection of \$17.67 billion. As of December 2015, written and purchased credit derivatives had total gross notional amounts of \$70.52 billion and \$93.49 billion, respectively, for total net notional purchased protection of \$22.97 billion. Substantially all of the Bank's written and purchased credit derivatives are credit default swaps.

The table below presents certain information about credit derivatives.

\$ in millions	Credit Spread on Underlier (basis points)				Total
	0 -250	251 - 500	501 - 1,000	Greater than 1,000	
<b>As of June 2016</b>					
<b>Maximum Payout/Notional Amount of Written Credit Derivatives by Tenor</b>					
Less than 1 year	\$ 21,948	\$ 327	\$ 207	\$ 374	\$ 22,856
1 - 5 years	30,133	3,090	1,447	1,687	36,357
Greater than 5	8,145	631	27	39	8,842
<b>Total</b>	<b>\$ 60,226</b>	<b>\$ 4,048</b>	<b>\$ 1,681</b>	<b>\$ 2,100</b>	<b>\$ 68,055</b>
<b>Maximum Payout/Notional Amount of Purchased Credit Derivatives</b>					
Offsetting	\$ 49,603	\$ 2,962	\$ 1,605	\$ 1,965	\$ 56,135
Other	27,101	1,595	530	373	29,599
<b>Fair Value of Written Credit Derivatives</b>					
Asset	\$ 1,062	\$ 130	\$ 51	\$ 29	\$ 1,272
Liability	286	67	33	442	828
<b>Net asset/(liability)</b>	<b>\$ 776</b>	<b>\$ 63</b>	<b>\$ 18</b>	<b>\$ (413)</b>	<b>\$ 444</b>

<b>As of December 2015</b>					
<b>Maximum Payout/Notional Amount of Written Credit Derivatives by Tenor</b>					
Less than 1 year	\$ 23,503	\$ 298	\$ 407	\$ 355	\$ 24,563
1 - 5 years	33,089	1,970	1,068	1,554	37,681
Greater than 5	7,597	564	67	47	8,275
<b>Total</b>	<b>\$ 64,189</b>	<b>\$ 2,832</b>	<b>\$ 1,542</b>	<b>\$ 1,956</b>	<b>\$ 70,519</b>
<b>Maximum Payout/Notional Amount of Purchased Credit Derivatives</b>					
Offsetting	\$ 53,060	\$ 2,615	\$ 1,464	\$ 1,926	\$ 59,065
Other	31,335	2,175	356	555	34,421
<b>Fair Value of Written Credit Derivatives</b>					
Asset	\$ 1,023	\$ 49	\$ 26	\$ 37	\$ 1,135
Liability	691	78	81	307	1,157
<b>Net asset/(liability)</b>	<b>\$ 332</b>	<b>\$ (29)</b>	<b>\$ (55)</b>	<b>\$ (270)</b>	<b>\$ (22)</b>

In the table above:

- Fair values exclude the effects of both netting of receivable balances with payable balances under enforceable netting agreements, and netting of cash received or posted under enforceable credit support agreements, and therefore are not representative of the Bank's credit exposure.
- Tenor is based on expected duration for mortgage-related credit derivatives and on remaining contractual maturity for other credit derivatives.
- The credit spread on the underlier, together with the tenor of the contract, are indicators of payment/performance risk. The Bank is less likely to pay or otherwise be required to perform where the credit spread and the tenor are lower.
- Offsetting purchased credit derivatives represent the notional amount of purchased credit derivatives that economically hedge written credit derivatives with identical underliers and are included in Offsetting.
- Other purchased credit derivatives represent the notional amount of all other purchased credit derivatives not included in Offsetting.

### Impact of Credit Spreads on Derivatives

On an ongoing basis, the Bank realizes gains or losses relating to changes in credit risk through the unwind of derivative contracts and changes in credit mitigants.

The net gain/(loss), including hedges, attributable to the impact of changes in credit exposure and credit spreads (of the Bank's counterparties as well as of the Bank or its affiliates) on derivatives was \$46 million and \$(13) million for the six months ended June 2016 and June 2015, respectively.

### Derivatives with Credit-Related Contingent Features

Certain of the Bank's derivatives have been transacted under bilateral agreements with counterparties who may require the Bank to post collateral or terminate the transactions based on changes in the credit ratings of the Bank or its affiliates. Typically, such requirements are based on the credit ratings of GS Group. The Bank assesses the impact of these bilateral agreements by determining the collateral or termination payments that would occur assuming a downgrade by all rating agencies.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

A downgrade by any one rating agency, depending on the agency's relative ratings of the Bank or its affiliates at the time of the downgrade, may have an impact which is comparable to the impact of a downgrade by all rating agencies.

The table below presents the aggregate fair value of net derivative liabilities under such agreements (excluding application of collateral posted to reduce these liabilities), the related aggregate fair value of the assets posted as collateral and the additional collateral or termination payments that could have been called at the reporting date by counterparties in the event of a one-notch and two-notch downgrade in the credit ratings of the Bank or its affiliates.

<i>\$ in millions</i>	As of	
	June 2016	December 2015
Net derivative liabilities under bilateral agreements	\$ 6,725	\$ 5,448
Collateral posted	5,974	4,631
Additional collateral or termination payments:		
One-notch downgrade	332	485
Two-notch downgrade	566	835

### Hedge Accounting

The Bank applies hedge accounting for certain interest rate swaps used to manage the interest rate exposure of certain fixed-rate certificates of deposit.

To qualify for hedge accounting, the hedging instrument must be highly effective at reducing the risk from the exposure being hedged. Additionally, the Bank must formally document the hedging relationship at inception and test the hedging relationship at least on a quarterly basis to ensure the hedging instrument continues to be highly effective over the life of the hedging relationship.

### Fair Value Hedges

The Bank designates certain interest rate swaps as fair value hedges. These interest rate swaps hedge changes in fair value attributable to the designated benchmark interest rate (e.g., London Interbank Offered Rate (LIBOR)), effectively converting a substantial portion of fixed-rate obligations into floating-rate obligations.

The Bank applies a statistical method that utilizes regression analysis when assessing the effectiveness of its fair value hedging relationships in achieving offsetting changes in the fair values of the hedging instrument and the risk being hedged (i.e., interest rate risk).

An interest rate swap is considered highly effective in offsetting changes in fair value attributable to changes in the hedged risk when the regression analysis results in a coefficient of determination of 80% or greater and a slope between 80% and 125%.

For qualifying fair value hedges, gains or losses on derivatives are included in "Interest expense." The change in fair value of the hedged item attributable to the risk being hedged is reported as an adjustment to its carrying value and is subsequently amortized into interest expense over its remaining life. Gains or losses resulting from hedge ineffectiveness are included in "Interest expense." When a derivative is no longer designated as a hedge, any remaining difference between the carrying value and par value of the hedged item is amortized to interest expense over the remaining life of the hedged item using the effective interest method. See Note 19 for further information about interest income and interest expense.

The table below presents the gains/(losses) from interest rate derivatives accounted for as hedges, the related hedged Bank deposits, and the hedge ineffectiveness on these derivatives, which primarily consists of amortization of prepaid credit spreads resulting from the passage of time.

<i>\$ in millions</i>	Six Months Ended June	
	2016	2015
Interest rate hedges	\$ 515	\$ (28)
Hedged deposits	(526)	9
<b>Hedge ineffectiveness</b>	<b>\$ (11)</b>	<b>\$ (19)</b>

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Note 8.

#### Fair Value Option

#### Other Financial Assets and Financial Liabilities at Fair Value

In addition to all cash and derivative instruments included in “Financial instruments owned, at fair value” and “Financial instruments sold, but not yet purchased, at fair value,” the Bank accounts for certain of its other financial assets and financial liabilities at fair value primarily under the fair value option. The primary reasons for electing the fair value option are to:

- Reflect economic events in earnings on a timely basis;
- Mitigate volatility in earnings from using different measurement attributes (e.g., transfers of financial instruments owned accounted for as financings are recorded at fair value whereas the related secured financing would be recorded on an accrual basis absent electing the fair value option); and
- Address simplification and cost-benefit considerations (e.g., accounting for hybrid financial instruments at fair value in their entirety versus bifurcation of embedded derivatives and hedge accounting for debt hosts).

Hybrid financial instruments are instruments that contain bifurcated embedded derivatives and do not require settlement by physical delivery of non-financial assets (e.g., physical commodities). The Bank does not bifurcate hybrid financial instruments and accounts for the entire hybrid financial instrument at fair value under the fair value option.

Other financial assets and financial liabilities accounted for at fair value under the fair value option include:

- Repurchase agreements and certain resale agreements;
- Certain other secured financings, consisting of advances from the Federal Home Loan Bank of New York (FHLB) and transfers of assets accounted for as financings rather than sales;
- Certain unsecured borrowings and;
- Certain time deposits (deposits with no stated maturity are not eligible for a fair value option election), including structured certificates of deposit, which are hybrid financial instruments.

#### Fair Value of Other Financial Assets and Financial Liabilities by Level

The table below presents, by level within the fair value hierarchy, other financial assets and financial liabilities accounted for at fair value primarily under the fair value option. In the table below, other financial assets are shown as positive amounts and other financial liabilities are shown as negative amounts.

<i>\$ in millions</i>	Level 1	Level 2	Level 3	Total
<b>As of June 2016</b>				
<b>Assets</b>				
Securities purchased under				
agreements to resell	\$ –	\$ 2,115	\$ –	\$ 2,115
<b>Total</b>	<b>\$ –</b>	<b>\$ 2,115</b>	<b>\$ –</b>	<b>\$ 2,115</b>

<b>Liabilities</b>				
Deposits	\$ –	\$ (2,178)	\$ (2,936)	\$ (5,114)
Securities sold under				
agreements to repurchase	–	(3,319)	–	(3,319)
Other secured financings	–	(2,423)	–	(2,423)
Unsecured borrowings	–	(241)	–	(241)
<b>Total</b>	<b>\$ –</b>	<b>\$ (8,161)</b>	<b>\$ (2,936)</b>	<b>\$ (11,097)</b>

<b>As of December 2015</b>				
<b>Assets</b>				
Securities purchased under				
agreements to resell	\$ –	\$ 1,025	\$ –	\$ 1,025
<b>Total</b>	<b>\$ –</b>	<b>\$ 1,025</b>	<b>\$ –</b>	<b>\$ 1,025</b>

<b>Liabilities</b>				
Deposits	\$ –	\$ (3,929)	\$ (2,221)	\$ (6,150)
Securities sold under				
agreements to repurchase	–	(3,425)	–	(3,425)
Other secured financings	–	(2,919)	–	(2,919)
Unsecured borrowings	–	(98)	–	(98)
<b>Total</b>	<b>\$ –</b>	<b>\$ (10,371)</b>	<b>\$ (2,221)</b>	<b>\$ (12,592)</b>

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Valuation Techniques and Significant Inputs

Other financial assets and financial liabilities at fair value are generally valued based on discounted cash flow techniques, which incorporate inputs with reasonable levels of price transparency, and are generally classified as level 2 because the inputs are observable. Valuation adjustments may be made for liquidity and for counterparty and the Bank's credit quality.

See below for information about the significant inputs used to value other financial assets and financial liabilities at fair value, including the ranges of significant unobservable inputs used to value the level 3 instruments within these categories. These ranges represent the significant unobservable inputs that were used in the valuation of each type of other financial assets and financial liabilities at fair value.

The ranges and weighted averages of these inputs are not representative of the appropriate inputs to use when calculating the fair value of any one instrument. For example, the highest yield presented below for other secured financings is appropriate for valuing a specific agreement in that category but may not be appropriate for valuing any other agreements in that category. Accordingly, the ranges of inputs presented below do not represent uncertainty in, or possible ranges of, fair value measurements of the Bank's level 3 other financial assets and financial liabilities.

**Resale and Repurchase Agreements.** The significant inputs to the valuation of resale and repurchase agreements are funding spreads, the amount and timing of expected future cash flows and interest rates. As of both June 2016 and December 2015, the Bank had no level 3 resale or repurchase agreements. See Note 10 for further information about collateralized agreements and financings.

**Other Secured Financings.** The significant inputs to the valuation of other secured financings at fair value are the amount and timing of expected future cash flows, interest rates, funding spreads, the fair value of the collateral delivered by the Bank (which is determined using the amount and timing of expected future cash flows, market prices, market yields and recovery assumptions) and the frequency of additional collateral calls. As of both June 2016 and December 2015, there were no level 3 other secured financings.

**Deposits.** The significant inputs to the valuation of time deposits are interest rates and the amount and timing of future cash flows. The inputs used to value the embedded derivative component of hybrid financial instruments are consistent with the inputs used to value the Bank's other derivative instruments. See Note 7 for further information about derivatives. See Note 13 for further information about deposits.

The Bank's deposits that are included in level 3 are hybrid financial instruments. As the significant unobservable inputs used to value hybrid financial instruments primarily relate to the embedded derivative component of these deposits, these inputs are incorporated in the Bank's derivative disclosures related to unobservable inputs in Note 7.

### Transfers Between Levels of the Fair Value Hierarchy

Transfers between levels of the fair value hierarchy are reported at the beginning of the reporting period in which they occur. There were no transfers of other financial assets and financial liabilities between level 1 and level 2 and between level 2 and level 3 during the six months ended June 2016 and June 2015.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Level 3 Rollforward

The table below presents changes in fair value for other financial assets and financial liabilities accounted for at fair value categorized as level 3 as of the end of the period. In the table below:

- If a financial liability was transferred to level 3 during a reporting period, its entire gain or loss for the period is included in level 3. For level 3 other financial liabilities, increases are shown as negative amounts, while decreases are shown as positive amounts.
- Level 3 other financial liabilities are frequently economically hedged with cash instruments and derivatives. Accordingly, gains or losses that are reported in level 3 can be partially offset by gains or losses attributable to level 1, 2 or 3 cash instruments or derivatives. As a result, gains or losses included in the level 3 rollforward below do not necessarily represent the overall impact on the Bank's results of operations, liquidity or capital resources.

- Net unrealized gains/(losses) relate to instruments that were still held at period-end.
- For the six months ended June 2016, the net realized and unrealized loss on level 3 other financial liabilities of \$217 million (reflecting \$14 million of realized losses and \$203 million of unrealized losses) were reported in "Gains and losses from financial instruments, net."
- For the six months ended June 2015, the net realized and unrealized gain on level 3 other financial liabilities of \$50 million (reflecting \$3 million of realized losses and \$53 million of unrealized gains) were reported in "Gains and losses from financial instruments, net."
- See "Level 3 Rollforward Commentary" below for an explanation of the activity related to transfers into and out of level 3.

Level 3 Other Financial Liabilities at Fair Value

<i>\$ in millions</i>	Balance,	Net	Net					Transfers	Transfers	Balance,
	beginning of period	realized losses	unrealized gains/(losses)	Purchases	Sales	Issuances	Settlements	into level 3	out of level 3	end of period
<b>Six Months Ended June 2016</b>										
Deposits	\$ (2,221)	\$ (14)	\$ (203)	\$ -	\$ -	\$ (513)	\$ 15	\$ -	\$ -	\$ (2,936)
<b>Total other financial liabilities</b>	<b>\$ (2,221)</b>	<b>\$ (14)</b>	<b>\$ (203)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (513)</b>	<b>\$ 15</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (2,936)</b>
<b>Six Months Ended June 2015</b>										
Deposits	\$ (1,065)	\$ (3)	\$ 53	\$ -	\$ -	\$ (703)	\$ 38	\$ -	\$ -	\$ (1,680)
<b>Total other financial liabilities</b>	<b>\$ (1,065)</b>	<b>\$ (3)</b>	<b>\$ 53</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (703)</b>	<b>\$ 38</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (1,680)</b>

### Level 3 Rollforward Commentary

**Six Months Ended June 2016.** There were no transfers into or out of level 3 of other financial liabilities during the six months ended June 2016.

The net unrealized losses on level 3 other financial liabilities of \$203 million for the six months ended June 2016 consisted of losses on certain hybrid financial instruments included in deposits, principally due to the impact of an increase in the market value of the underlying assets.

**Six Months Ended June 2015.** There were no transfers into or out of level 3 of other financial liabilities during the six months ended June 2015.

The net unrealized gain on level 3 other financial liabilities of \$53 million for the six months ended June 2016 consisted of gains on certain hybrid financial instruments included in deposits, principally due to the impact of a decrease in the market value of the underlying assets.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Gains and Losses on Financial Assets and Financial Liabilities Accounted for at Fair Value Under the Fair Value Option

The table below presents the gains and losses recognized in earnings as a result of the Bank electing to apply the fair value option to certain financial assets and financial liabilities. These gains and losses are included in “Gains and losses from financial instruments, net.” The table below also includes gains and losses on the embedded derivative component of hybrid financial instruments included in deposits. These gains and losses would have been recognized under other U.S. GAAP even if the Bank had not elected to account for the entire hybrid financial instrument at fair value.

<i>\$ in millions</i>	Six Months Ended June	
	2016	2015
Deposits	\$ (250)	\$ 36
Other	(22)	2
<b>Total</b>	<b>\$ (272)</b>	<b>\$ 38</b>

In the table above:

- Gains/(losses) exclude contractual interest, which is included in “Interest income” and “Interest expense,” for all instruments other than hybrid financial instruments. See Note 19 for further information about interest income and interest expense.
- Other primarily consists of gains/(losses) on certain unsecured borrowings and FHLB advances.

Excluding the gains and losses on the instruments accounted for under the fair value option described above, “Gains and losses from financial instruments, net” primarily represents gains and losses on “Financial instruments owned, at fair value,” “Financial instruments sold, but not yet purchased, at fair value” and the syndication of loans and lending commitments.

### Loans and Lending Commitments at Fair Value

The Bank originates loans to provide financing to clients. These loans are typically longer-term in nature. The Bank’s lending activities include lending to investment-grade and non-investment-grade corporate borrowers. The Bank’s lending activities also include extending loans to borrowers that are secured by commercial and residential real estate. In addition, the Bank extends loans and lending commitments to private wealth management clients that are primarily secured by residential real estate or other assets.

The Bank accounts for certain loans at fair value under the fair value option which are included in “Financial instruments owned, at fair value.” See Note 6 for a discussion of the techniques and significant inputs used in the valuation of loans. See Note 9 for information about loans receivable not accounted for at fair value.

The table below presents details about loans at fair value. In the table below, loans to private wealth management clients includes \$6.36 billion and \$5.95 billion of loans secured by residential real estate and \$70 million and \$31 million of loans secured by commercial real estate as of June 2016 and December 2015, respectively.

<i>\$ in millions</i>	As of	
	June 2016	December 2015
Corporate loans	\$ 1,691	\$ 2,614
Loans to private wealth management clients	6,646	6,168
Loans backed by commercial real estate	436	1,478
Loans backed by residential real estate	1	43
Other loans	150	51
<b>Total</b>	<b>\$ 8,924</b>	<b>\$ 10,354</b>

As of June 2016, the aggregate contractual principal amount of loans for which the fair value option was elected was less than the related fair value by \$14 million. As of December 2015, the aggregate contractual principal amount of loans for which the fair value option was elected exceeded the related fair value by \$105 million. Included in these amounts are loans in non-accrual status (including loans more than 90 days past due) with a principal balance of \$36 million and a fair value of \$27 million as of June 2016, and a principal balance of \$7 million and a fair value of \$1 million as of December 2015.

As of June 2016 and December 2015, the fair value of unfunded lending commitments accounted for under the fair value option was \$4.29 billion and \$9.45 billion, respectively. The carrying value of such lending commitments was a liability of \$68 million and \$153 million as of June 2016 and December 2015, respectively. See Note 16 for further information about lending commitments.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Impact of Credit Spreads on Loans and Lending Commitments

The estimated net gain attributable to changes in instrument-specific credit spreads on loans and lending commitments for which the fair value option was elected was \$43 million and \$319 million for the six months ended June 2016 and June 2015, respectively. The Bank generally calculates the fair value of loans and lending commitments for which the fair value option is elected by discounting future cash flows at a rate which incorporates the instrument-specific credit spreads. For floating-rate loans and lending commitments, substantially all changes in fair value are attributable to changes in instrument-specific credit spreads, whereas for fixed-rate loans and lending commitments, changes in fair value are also attributable to changes in interest rates.

### Debt Valuation Adjustment

The Bank calculates the fair value of financial liabilities for which the fair value option is elected by discounting future cash flows at a rate which incorporates the Bank's credit spreads. The net DVA on such financial liabilities was a loss of \$15 million (\$9 million, net of tax) for the six months ended June 2016. The gains/(losses) reclassified to earnings from accumulated other comprehensive loss upon extinguishment of such financial liabilities were not material for the six months ended June 2016. As of June 2016, the amount included in "Other comprehensive loss" on the condensed consolidated statements of changes in shareholder's equity related to DVA.

### Note 9.

#### Loans Receivable

Loans receivable is primarily comprised of loans held for investment that are accounted for at amortized cost net of allowance for loan losses. Interest on loans receivable is recognized over the life of the loan and is recorded on an accrual basis.

The table below presents details about loans receivable.

<i>\$ in millions</i>	As of	
	June 2016	December 2015
Corporate loans	\$ 18,952	\$ 16,903
Loans to private wealth management clients	12,929	12,823
Loans backed by commercial real estate	3,269	3,614
Loans backed by residential real estate	881	1,325
Other loans	3,241	3,398
Total loans receivable, gross	39,272	38,063
Allowance for loan losses	(236)	(189)
<b>Total loans receivable</b>	<b>\$ 39,036</b>	<b>\$ 37,874</b>

In the table above:

- Loans to private wealth management clients include \$11.34 billion and \$11.25 billion of loans secured by investments in real or financial assets, \$1.48 billion and \$1.50 billion of loans secured by commercial real estate and \$108 million and \$75 million of loans secured by residential real estate as of June 2016 and December 2015, respectively.
- Total loans receivable consists of \$36.18 billion and \$36.38 billion of loans at amortized cost as of June 2016 and December 2015, respectively, and \$2.86 billion and \$1.49 billion of loans held for sale as of June 2016 and December 2015, respectively.

As of June 2016 and December 2015, the fair value of loans held for investment was \$35.91 billion and \$36.09 billion, respectively. As of June 2016, had these loans been carried at fair value and included in the fair value hierarchy, \$18.64 billion and \$17.27 billion would have been classified in level 2 and level 3, respectively. As of December 2015, had these loans been carried at fair value and included in the fair value hierarchy, \$18.82 billion and \$17.27 billion would have been classified in level 2 and level 3, respectively.



## Notes to Condensed Consolidated Financial Statements (Unaudited)

The Bank also extends lending commitments that are held for investment and accounted for on an accrual basis. As of June 2016 and December 2015, such lending commitments were \$77.30 billion and \$77.98 billion, respectively, substantially all of which were extended to corporate borrowers. The carrying value and the estimated fair value of such lending commitments were liabilities of \$242 million and \$2.68 billion, respectively, as of June 2016, and \$201 million and \$2.78 billion, respectively, as of December 2015. The carrying value included \$170 million and \$122 million as of June 2016 and December 2015, respectively, related to the allowance for losses on unfunded commitments. As these lending commitments are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP, their fair value is not included in the Bank's fair value hierarchy in Notes 6 through 8. As of June 2016, had these lending commitments been carried at fair value and included in the Bank's fair value hierarchy, \$1.10 billion and \$1.58 billion would have been classified in level 2 and level 3, respectively. As of December 2015, had these lending commitments been carried at fair value and included in the Bank's fair value hierarchy, \$1.12 billion and \$1.66 billion would have been classified in level 2 and level 3, respectively.

Included in loans receivable are loans held for sale which are accounted for at the lower of cost or market. The carrying value of such loans was \$2.86 billion and \$1.49 billion as of June 2016 and December 2015, respectively. As of June 2016 and December 2015, the carrying value of loans held for sale generally approximated fair value. While these loans are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the Bank's fair value hierarchy in Notes 6 through 8. As of June 2016 and December 2015, had these items been included in the fair value hierarchy, most would have been classified in level 2. In addition, as of June 2016 and December 2015, \$5.16 billion and \$7.01 billion, respectively, of the Bank's lending commitments were held for sale and were accounted for at the lower of cost or fair value.

The following is a description of the captions in the table above:

- **Corporate Loans.** Corporate loans include term loans, revolving lines of credit, letter of credit facilities and bridge loans, and are principally used for operating liquidity and general corporate purposes, or in connection with acquisitions. Corporate loans include loans made as part of the Bank's Community Reinvestment Act activities. Corporate loans may be secured or unsecured, depending on the loan purpose, the risk profile of the borrower and other factors.
- **Loans to Private Wealth Management Clients.** Loans to the Bank's private wealth management clients include loans used by clients to finance private asset purchases, employ leverage for strategic investments in real or financial assets, bridge cash flow timing gaps or provide liquidity for other needs. Such loans are primarily secured by securities or other assets.
- **Loans Backed by Commercial Real Estate.** Loans backed by commercial real estate include loans extended by the Bank that are directly or indirectly secured by hotels, retail stores, multifamily housing complexes and commercial and industrial properties. Loans backed by commercial real estate also include loans purchased by the Bank.
- **Loans Backed by Residential Real Estate.** Loans backed by residential real estate include loans extended by the Bank to clients who warehouse assets that are directly or indirectly secured by residential real estate. Loans backed by residential real estate also include loans purchased by the Bank.
- **Other Loans.** Other loans primarily include loans extended to clients who warehouse assets that are directly or indirectly secured by consumer loans, including auto loans, and private student loans and other assets.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Credit Quality

The Bank's risk assessment process includes evaluating the credit quality of its loans receivable. The Bank performs credit reviews which include initial and ongoing analyses of its borrowers. A credit review is an independent analysis of the capacity and willingness of a borrower to meet its financial obligations, resulting in an internal credit rating. The determination of internal credit ratings also incorporates assumptions with respect to the nature of and outlook for the borrower's industry, and the economic environment. The Bank also assigns a regulatory risk rating to such loans based on the definitions provided by the U.S. federal bank regulatory agencies. Such loans are determined to be impaired when it is probable that the Bank will not be able to collect all principal and interest due under the contractual terms of the loan. At that time, loans are generally placed on non-accrual status, all accrued but uncollected interest is reversed against interest income, and interest subsequently collected is recognized on a cash basis to the extent the loan balance is deemed collectible. Otherwise, all cash received is used to reduce the outstanding loan balance. In certain circumstances, the Bank may also modify the original terms of a loan agreement by granting a concession to a borrower experiencing financial difficulty. Such modifications are considered troubled debt restructurings and typically include interest rate reductions, payment extensions, and modification of loan covenants. Loans modified in a troubled debt restructuring are considered impaired and are subject to specific loan-level reserves. As of June 2016 and December 2015, impaired loans receivable in non-accrual status were \$250 million and \$62 million, respectively. As of June 2016, such loans included \$38 million of corporate loans that were modified in a troubled debt restructuring, and the Bank had \$222 million in lending commitments related to these loans. There were no such loans as of December 2015.

The table below presents gross loans receivable and related lending commitments by the Bank's internally determined public rating agency equivalent and by regulatory risk rating. Non-criticized/pass loans and lending commitments represent loans and lending commitments that are performing and/or do not demonstrate adverse characteristics that are likely to result in a credit loss. The table includes loans and lending commitments held for investment and held for sale.

<i>\$ in millions</i>	Lending		
	Loans	Commitments	Total
<b>Credit Rating Equivalent</b>			
<b>As of June 2016</b>			
Investment-grade	\$ 19,465	\$ 61,529	\$ 80,994
Non-investment-grade	19,807	20,931	40,738
<b>Total</b>	<b>\$ 39,272</b>	<b>\$ 82,460</b>	<b>\$ 121,732</b>
<b>As of December 2015</b>			
Investment-grade	\$ 18,323	59,251	\$ 77,574
Non-investment-grade	19,740	25,738	45,478
<b>Total</b>	<b>\$ 38,063</b>	<b>\$ 84,989</b>	<b>\$ 123,052</b>
<b>Regulatory Risk Rating</b>			
<b>As of June 2016</b>			
Non-criticized/pass	\$ 37,950	\$ 80,331	\$ 118,281
Criticized	1,322	2,129	3,451
<b>Total</b>	<b>\$ 39,272</b>	<b>\$ 82,460</b>	<b>\$ 121,732</b>
<b>As of December 2015</b>			
Non-criticized/pass	\$ 36,633	\$ 83,627	\$ 120,260
Criticized	1,430	1,362	2,792
<b>Total</b>	<b>\$ 38,063</b>	<b>\$ 84,989</b>	<b>\$ 123,052</b>

### Allowance for Losses on Loans and Lending Commitments

The Bank's allowance for loan losses is comprised of specific loan-level reserves and portfolio level reserves as described below:

- Specific loan-level reserves are determined on loans that exhibit credit quality weakness and are therefore individually evaluated for impairment.
- Portfolio level reserves are determined on loans not deemed impaired by aggregating groups of loans with similar risk characteristics and estimating the probable loss inherent in the portfolio.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

The allowance for loan losses is determined using various inputs, including industry default and loss data, current macroeconomic indicators, borrower's capacity to meet its financial obligations, borrower's country of risk, loan seniority and collateral type. Management's estimate of loan losses entails judgment about loan collectability at the reporting dates, and there are uncertainties inherent in those judgments. While management uses the best information available to determine this estimate, future adjustments to the allowance may be necessary based on, among other things, changes in the economic environment or variances between actual results and the original assumptions used. Loans are charged off against the allowance for loan losses when deemed to be uncollectible. As of June 2016 and December 2015, substantially all of the Bank's loans receivable were evaluated for impairment at the portfolio level.

The Bank also records an allowance for losses on lending commitments that are held for investment and accounted for on an accrual basis. Such allowance is determined using the same methodology as the allowance for loan losses, while also taking into consideration the probability of drawdowns or funding, and is included in "Other liabilities and accrued expenses." As of June 2016 and December 2015, substantially all of such lending commitments were evaluated for impairment at the portfolio level.

The table below presents changes in the allowance for loan losses and the allowance for losses on lending commitments. In the table below, Other represents the reduction to the allowance related to loans and lending commitments transferred to held for sale.

<i>\$ in millions</i>	Six Months Ended	Year Ended
	June 2016	December 2015
<b>Allowance for loan losses</b>		
Balance, beginning of period	\$ 189	\$ 137
Charge-offs	-	(1)
Provision	64	53
Other	(17)	-
<b>Balance, end of period</b>	<b>\$ 236</b>	<b>\$ 189</b>
<b>Allowance for losses on lending commitments</b>		
Balance, beginning of period	\$ 122	\$ 61
Provision	60	61
Other	(12)	-
<b>Balance, end of period</b>	<b>\$ 170</b>	<b>\$ 122</b>

As of June 2016 and December 2015, substantially all of the allowance for loan losses and allowance for losses on lending commitments were related to corporate loans and corporate lending commitments and were primarily determined at the portfolio level.

### Note 10. Collateralized Agreements and Financings

Collateralized agreements are securities purchased under agreements to resell (resale agreements). Collateralized financings are securities sold under agreements to repurchase (repurchase agreements) and other secured financings. The Bank enters into these transactions in order to, among other things, facilitate client activities, invest excess cash, and finance certain Bank activities.

Collateralized agreements and financings are presented on a net-by-counterparty basis when a legal right of setoff exists. Interest on collateralized agreements and collateralized financings is recognized over the life of the transaction and included in "Interest income" and "Interest expense," respectively. See Note 19 for further information about interest income and interest expense.

The table below presents the carrying value of resale and repurchase agreements.

<i>\$ in millions</i>	As of	
	June 2016	December 2015
Securities purchased under agreements to resell	\$ 3,375	\$ 2,481
Securities sold under agreements to repurchase	3,319	3,425

In the table above:

- All repurchase agreements are carried at fair value under the fair value option.
- As of June 2016 and December 2015, \$2.12 billion and \$1.03 billion of resale agreements were at fair value, respectively.

See Note 8 for further information about the valuation techniques and significant inputs used to determine fair value.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Resale and Repurchase Agreements

A resale agreement is a transaction in which the Bank purchases financial instruments from a seller, typically in exchange for cash, and simultaneously enters into an agreement to resell the same or substantially the same financial instruments to the seller at a stated price plus accrued interest at a future date.

A repurchase agreement is a transaction in which the Bank sells financial instruments to a buyer, typically in exchange for cash, and simultaneously enters into an agreement to repurchase the same or substantially the same financial instruments from the buyer at a stated price plus accrued interest at a future date.

The financial instruments purchased or sold in resale and repurchase agreements primarily include U.S. government and federal agency obligations.

The Bank receives financial instruments purchased under resale agreements and makes delivery of financial instruments sold under repurchase agreements. To mitigate credit exposure, the Bank monitors the market value of these financial instruments on a daily basis, and delivers or obtains additional collateral due to changes in the market value of the financial instruments, as appropriate. For resale agreements, the Bank typically requires collateral with a fair value approximately equal to the carrying value of the relevant assets in the condensed consolidated statements of financial condition.

### Offsetting Arrangements

The table below presents the gross and net resale and repurchase agreements and the related amount of counterparty netting included in the condensed consolidated statements of financial condition. The table below also presents the amounts not offset in the condensed consolidated statements of financial condition, including counterparty netting that does not meet the criteria for netting under U.S. GAAP and the fair value of cash or securities collateral received or posted subject to enforceable credit support agreements.

	Assets	Liabilities
	Resale	Repurchase
	agreements	agreements
<i>\$ in millions</i>		
<b>As of June 2016</b>		
<b>Included in the condensed consolidated statements of financial condition</b>		
Gross carrying value	\$ 7,891	\$ 7,835
Counterparty netting	(4,516)	(4,516)
<b>Total</b>	<b>3,375</b>	<b>3,319</b>
<b>Amounts not offset</b>		
Counterparty netting	(105)	(105)
Collateral	(3,165)	(3,208)
<b>Total</b>	<b>\$ 105</b>	<b>\$ 6</b>
<b>As of December 2015</b>		
<b>Included in the condensed consolidated statements of financial condition</b>		
Gross carrying value	\$ 5,759	\$ 6,703
Counterparty netting	(3,278)	(3,278)
<b>Total</b>	<b>2,481</b>	<b>3,425</b>
<b>Amounts not offset</b>		
Counterparty netting	(131)	(131)
Collateral	(2,234)	(3,294)
<b>Total</b>	<b>\$ 116</b>	<b>\$ -</b>

In the tables above:

- The majority of the gross carrying values of these arrangements are subject to enforceable netting agreements.
- Where the Bank has received or posted collateral under credit support agreements, but has not yet determined such agreements are enforceable, the related collateral has not been netted.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Gross Carrying Value of Repurchase Agreements

The table below presents the gross carrying value of repurchase agreements by class of collateral pledged.

<i>\$ in millions</i>	Repurchase agreements as of	
	June 2016	December 2015
U.S. government and federal		
agency obligations	\$ 7,595	\$ 6,336
Corporate debt securities	87	92
Non-U.S. government and agency obligations	153	275
<b>Total</b>	<b>\$ 7,835</b>	<b>\$ 6,703</b>

As of June 2016 and December 2015, all of the Bank's repurchase agreements were either overnight or had no stated maturity.

### Other Secured Financings

In addition to repurchase agreements, the Bank funds certain assets through the use of other secured financings and pledges financial instruments and other assets as collateral in these transactions. These other secured financings consist of FHLB advances and transfers of financial assets accounted for as financings rather than sales (primarily collateralized by bank loans and mortgage whole loans included in "Financial instruments owned, at fair value").

The Bank has elected to apply the fair value option to a portion of other secured financings because the use of fair value eliminates non-economic volatility in earnings that would arise from using different measurement attributes. See Note 8 for further information about other secured financings that are accounted for at fair value.

Other secured financings that are not recorded at fair value are recorded based on the amount of cash received plus accrued interest, which generally approximates fair value. While these financings are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the Bank's fair value hierarchy in Notes 6 through 8. Had these financings been included in the Bank's fair value hierarchy, they would have been primarily classified in level 3 as of June 2016 and December 2015.

**FHLB Advances.** The Bank is a member of the FHLB. As a member of the FHLB, the Bank can draw on funding secured by eligible collateral. As of June 2016 and December 2015, outstanding borrowings from the FHLB were \$2.42 billion and \$2.92 billion, respectively. As of both June 2016 and December 2015, interest rates ranged from 3-month LIBOR plus 0.14% to 0.36% with a weighted average rate of 3-month LIBOR plus 0.23%. These borrowings are carried at fair value under the fair value option in the Bank's fair value hierarchy. See Note 8 for further information about borrowings accounted for at fair value. Outstanding FHLB advances include \$502 million of short-term borrowings as of both June 2016 and December 2015, and \$1.92 billion and \$2.42 billion of long-term borrowings as of June 2016 and December 2015, respectively.

**Other.** As of June 2016 and December 2015, other secured financings, excluding FHLB advances, were \$148 million and \$107 million, respectively. All of the amounts outstanding as of June 2016 had a contractual maturity of one year or less. All of the amounts outstanding as of December 2015 had a contractual maturity of one year or more.

As of June 2016 and December 2015, the aggregate contractual principal amount of other secured financings for which the fair value option was elected approximated their fair value.

### Collateral Received and Pledged

The Bank receives cash and securities (e.g., U.S. government and federal agency, other sovereign and corporate obligations) as collateral, primarily in connection with resale agreements, derivative transactions and customer margin loans. The Bank obtains cash and securities as collateral on an upfront or contingent basis for derivative instruments and collateralized agreements to reduce its credit exposure to individual counterparties.

In many cases, the Bank is permitted to deliver or repledge financial instruments received as collateral when entering into repurchase agreements or collateralized derivative transactions.

The Bank also pledges certain financial instruments owned, at fair value and loans receivable in connection with repurchase agreements and other secured financings. These assets are pledged to counterparties who may or may not have the right to deliver or repledge them.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

The table below presents financial instruments at fair value received as collateral that were available to be delivered or repledged and were delivered or repledged by the Bank.

<i>\$ in millions</i>	As of	
	June 2016	December 2015
Collateral available to be delivered or repledged	\$ 11,567	\$ 6,622
Collateral that was delivered or repledged	5,097	3,778

The table below presents information about assets pledged.

<i>\$ in millions</i>	As of	
	June 2016	December 2015
Financial instruments owned, at fair value pledged to counterparties that:		
Had the right to deliver or repledge	\$ 4,092	\$ 5,358
Did not have the right to deliver or repledge	5,045	4,456
Other assets pledged to counterparties that:		
Did not have the right to deliver or repledge	148	107

### Note 11.

#### Variable Interest Entities

A variable interest in a VIE is an investment (e.g., debt or equity securities) or other interest (e.g., derivatives or loans and lending commitments) that will absorb portions of the VIE's expected losses and/or receive portions of the VIE's expected residual returns.

The Bank enters into derivatives with certain mortgage-backed and corporate collateralized debt obligations (CDO) VIEs and sells loans to collateralized loan obligations (CLO) VIEs. The Bank also makes investments in and loans to VIEs that hold real estate and distressed loans. The Bank enters into basis swaps on assets held by other asset-backed VIEs. The Bank generally enters into derivatives with other counterparties to mitigate its risk from derivatives with these VIEs.

VIEs generally finance the purchase of assets by issuing debt and equity securities that are either collateralized by or indexed to the assets held by the VIE. The debt and equity securities issued by a VIE may include tranches of varying levels of subordination. See Note 3 for the Bank's consolidation policies, including the definition of a VIE.

#### VIE Consolidation Analysis

The enterprise with a controlling financial interest in a VIE is known as the primary beneficiary and consolidates the VIE. The Bank determines whether it is the primary beneficiary of a VIE by performing an analysis that principally considers:

- Which variable interest holder has the power to direct the activities of the VIE that most significantly impact the VIE's economic performance;
- Which variable interest holder has the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE;
- The VIE's purpose and design, including the risks the VIE was designed to create and pass through to its variable interest holders;
- The VIE's capital structure;
- The terms between the VIE and its variable interest holders and other parties involved with the VIE; and
- Related-party relationships.

The Bank reassesses its initial evaluation of whether an entity is a VIE when certain reconsideration events occur. The Bank reassesses its determination of whether it is the primary beneficiary of a VIE on an ongoing basis based on current facts and circumstances.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Nonconsolidated VIEs

The table below presents information about nonconsolidated VIEs in which the Bank holds variable interests.

\$ in millions	As of	
	June 2016	December 2015
<b>Mortgage-Backed<sup>1</sup></b>		
Assets in VIEs	\$ 445	\$ 482
Carrying value of variable interests - assets	11	12
Carrying value of variable interests - liabilities	3	1
Maximum Exposure to Loss		
Derivatives	408	454
<b>Total maximum exposure to loss</b>	<b>408</b>	<b>454</b>
<b>Corporate CDOs and CLOs</b>		
Assets in VIEs	507	595
Carrying value of variable interests - assets	362	246
Carrying value of variable interests - liabilities	–	1
Maximum Exposure to Loss		
Commitments and guarantees	172	647
Derivatives	38	117
Loans and investments	342	245
<b>Total maximum exposure to loss</b>	<b>552</b>	<b>1,009</b>
<b>Real estate, credit-related and other investing</b>		
Assets in VIEs	1,916	1,562
Carrying value of variable interests - assets	521	485
Carrying value of variable interests - liabilities	–	1
Maximum Exposure to Loss		
Commitments and guarantees	74	172
Loans and investments	521	485
<b>Total maximum exposure to loss</b>	<b>595</b>	<b>657</b>
<b>Other asset-backed</b>		
Assets in VIE	3,422	3,538
Carrying value of variable interests - assets	258	69
Carrying value of variable interests - liabilities	61	126
Maximum Exposure to Loss		
Derivatives	3,157	3,171
Loans and investments	25	35
<b>Total maximum exposure to loss</b>	<b>3,182</b>	<b>3,206</b>
<b>Total nonconsolidated VIEs</b>		
Assets in VIEs	6,290	6,177
Carrying value of variable interests - assets	1,152	812
Carrying value of variable interests - liabilities	64	129
Maximum Exposure to Loss		
Commitments and guarantees	246	819
Derivatives	3,603	3,742
Loans and investments	888	765
<b>Total maximum exposure to loss</b>	<b>\$ 4,737</b>	<b>\$ 5,326</b>

1. Assets in VIEs and maximum exposure to loss include \$176 million and \$223 million as of June 2016 and December 2015, respectively, related to CDOs backed by mortgage obligations.

The Bank's exposure to the obligations of VIEs is generally limited to its interests in these entities. In certain instances, the Bank provides guarantees, including derivative guarantees, to VIEs or holders of variable interests in VIEs.

In the table above, nonconsolidated VIEs are aggregated based on principal business activity. The nature of the Bank's variable interests can take different forms, as described in the rows under maximum exposure to loss. In the table above:

- The maximum exposure to loss excludes the benefit of offsetting financial instruments that are held to mitigate the risks associated with these variable interests.
- For loans and investments, the maximum exposure to loss is the carrying value of these interests.
- For commitments and guarantees, and derivatives, the maximum exposure to loss is the notional amount, which does not represent anticipated losses and also has not been reduced by unrealized losses already recorded. As a result, the maximum exposure to loss exceeds liabilities recorded for commitments and guarantees, and derivatives provided to VIEs.

The carrying value of all assets and liabilities held by the Bank related to its variable interests in nonconsolidated VIEs are included in the condensed consolidated statements of financial condition in "Financial instruments owned, at fair value" and "Financial instruments sold, but not yet purchased, at fair value."

### Consolidated VIEs

As of both June 2016 and December 2015, the Bank had no consolidated VIEs.

### Note 12.

#### Other Assets

Other assets are generally less liquid assets. The table below presents other assets by type.

\$ in millions	As of	
	June 2016	December 2015
Receivables from affiliates	\$ 308	\$ 399
Federal Reserve Board shares	412	412
Income tax-related assets	287	191
Federal Home Loan Bank shares	141	160
Other <sup>1</sup>	310	254
<b>Total</b>	<b>\$ 1,458</b>	<b>\$ 1,416</b>

1. Includes \$250 million and \$229 million related to investments in qualified affordable housing projects as of June 2016 and December 2015, respectively.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Note 13.

#### Deposits

The table below presents the types and sources of the Bank's deposits.

\$ in millions	Savings and		Total
	Demand	Time	
<b>As of June 2016</b>			
Private bank and online retail	\$ 45,191	\$ 2,262	\$ 47,453
Brokered certificates of deposit	–	42,524	42,524
Deposit sweep programs	15,852	–	15,852
Institutional	5,093	3,001	8,094
<b>Total</b>	<b>\$ 66,136</b>	<b>\$ 47,787</b>	<b>\$ 113,923</b>
<b>As of December 2015</b>			
Private bank	\$ 32,062	\$ 1,660	\$ 33,722
Brokered certificates of deposit	–	32,567	32,567
Deposit sweep programs	15,791	–	15,791
Institutional	4,204	2,000	6,204
<b>Total</b>	<b>\$ 52,057</b>	<b>\$ 36,227</b>	<b>\$ 88,284</b>

In April 2016, following regulatory approvals, the Bank acquired GE Capital Bank's online deposit platform and assumed \$16.52 billion of deposits, consisting of \$8.76 billion in online deposit accounts and certificates of deposit, and \$7.76 billion in brokered certificates of deposit.

In the table above:

- Savings and demand accounts are comprised of money market deposit accounts (MMDA), negotiable order of withdrawal accounts (NOW), and demand deposit accounts (DDA) that have no stated maturity or expiration date. Savings account holders may be required by the Bank to give written notice of intended withdrawals not less than seven days before such withdrawals are made and may be limited on the number of withdrawals made within a month. Demand account holders are not subject to restrictions with respect to the timing and number of transactions that deposit holders may execute.
- Time deposits consist primarily of brokered certificates of deposit which have stipulated maturity dates and rates of interest. Early withdrawals of time deposits are generally prohibited.
- Substantially all of the Bank's deposits are interest-bearing and are held in the U.S.

- Time deposits include \$5.11 billion and \$6.15 billion as of June 2016 and December 2015, respectively of deposits accounted for at fair value under the fair value option. See below and Note 8 for further information about deposits accounted for at fair value. These time deposits have a weighted average maturity of approximately three years as of both June 2016 and December 2015.

- Deposit sweep programs represent long-term contractual agreements with several U.S. broker-dealers who sweep client cash to FDIC-insured deposits. Pursuant to the external deposit sweep program agreements, each third party broker-dealer agrees, for a prescribed term, to place a certain minimum amount of deposits from their clients with the Bank. Each individual client's deposit may be withdrawn at any time. As of both June 2016 and December 2015, the Bank had eight external deposit sweep program contractual arrangements.

- All institutional deposits are from affiliates.
- Deposits insured by the FDIC as of June 2016 and December 2015 were approximately \$74.13 billion and \$55.48 billion, respectively.

The table below presents the Bank's time deposits by contractual maturity.

\$ in millions	As of June 2016
Remainder of 2016	\$ 7,638
2017	12,713
2018	6,035
2019	5,522
2020	4,252
2021	3,577
2022 - thereafter	8,050
<b>Total</b> <sup>1</sup>	<b>\$ 47,787</b>

1. Includes \$4.62 billion greater than \$250,000.



## Notes to Condensed Consolidated Financial Statements (Unaudited)

The Bank's savings and demand deposits were recorded based on the amount of cash received plus accrued interest, which approximates fair value. In addition, the Bank designates certain derivatives as fair value hedges to convert a majority of its time deposits not accounted for at fair value from fixed-rate obligations into floating-rate obligations. Accordingly, the carrying value of time deposits approximates fair value as of June 2016 and December 2015. While these savings, demand and most time deposits are carried at amounts that approximate fair value, they are not accounted for at fair value under the fair value option or at fair value in accordance with other U.S. GAAP and therefore are not included in the Bank's fair value hierarchy in Notes 6 through 8. Had these deposits been included in the Bank's fair value hierarchy, they would have been classified in level 2 as of June 2016 and December 2015.

The table below presents time deposits accounted for under the fair value option by tenor.

\$ in millions	As of			
	June 2016		December 2015	
	Principal	Fair Value	Principal	Fair Value
Maturity < 1 year	\$ 1,254	\$ 1,254	\$ 2,020	\$ 2,021
Maturity > 1 year	3,750	3,860	4,247	4,129
<b>Total</b>	<b>\$ 5,004</b>	<b>\$ 5,114</b>	<b>\$ 6,267</b>	<b>\$ 6,150</b>

### Note 14. Unsecured Borrowings

The table below presents details about the Bank's unsecured borrowings.

\$ in millions	As of	
	June 2016	December 2015
Unsecured long-term borrowings	\$ 2,135	\$ 2,059
Unsecured short-term borrowings	110	100
<b>Total</b>	<b>\$ 2,245</b>	<b>\$ 2,159</b>

### Subordinated Borrowings

The Bank has a \$5.00 billion revolving subordinated loan agreement with Group Inc., which matures in 2039. As of both June 2016 and December 2015, outstanding subordinated borrowings were \$2.00 billion. The carrying value of the subordinated borrowings generally approximates fair value. Amounts borrowed under this agreement bear interest at the federal funds open rate plus 1.85% per annum. Any amounts payable under the agreement would be subordinate to the claims of certain other creditors of the Bank, including depositors and regulatory agencies.

### Senior Unsecured Borrowings

The Bank has an \$8.50 billion committed senior unsecured credit line with Group Inc., which matures in 2017. As of June 2016 there were no outstanding borrowings under this facility. As of December 2015, the outstanding amount was \$59 million.

The Bank has a senior debt facility consisting of an uncommitted term unsecured line of credit with Group Inc., which matures in 2019. As of both June 2016 and December 2015, there were no outstanding borrowings under this facility.

### Other Unsecured Borrowings

The Bank held \$245 million and \$100 million of other unsecured borrowings as of June 2016 and December 2015, respectively, substantially all of which were hybrid financial instruments. As of June 2016, \$135 million was classified as long-term borrowings and \$110 million was classified as short-term borrowings. As of December 2015, \$100 million was classified as short-term borrowings and there were no long-term borrowings outstanding.

The Bank accounts for hybrid financial instruments at fair value under the fair value option. See Note 8 for further information about hybrid financial instruments that are accounted for at fair value.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Note 15.

#### Other Liabilities and Accrued Expenses

The table below presents other liabilities and accrued expenses by type.

<i>\$ in millions</i>	As of	
	June 2016	December 2015
Income tax-related liabilities	\$ 1,382	\$ 953
Payables to affiliates	285	959
Accrued expenses	487	507
<b>Total</b>	<b>\$ 2,154</b>	<b>\$ 2,419</b>

### Note 16.

#### Commitments, Contingencies and Guarantees

##### Commitments

The table below presents the Bank's commitments by type.

<i>\$ in millions</i>	As of	
	June 2016	December 2015
Commitments to extend credit		
Commercial lending:		
Investment-grade	\$ 62,342	\$ 65,259
Non-investment-grade	23,466	28,028
Warehouse financing	3,148	3,190
<b>Total commitments to extend credit</b>	<b>88,956</b>	<b>96,477</b>
Contingent and forward		
starting resale agreements	769	709
Forward starting repurchase and secured		
lending agreements	239	298
Investment commitments	638	708
Other	404	307
<b>Total commitments</b>	<b>\$ 91,006</b>	<b>\$ 98,499</b>

The table below presents the Bank's commitments by period of expiration.

<i>\$ in millions</i>	Commitment Amount by Period of Expiration as of June 2016			
	Remainder of 2016	2017 - 2018	2019 - 2020	2021 - Thereafter
Commitments to extend credit				
Commercial lending:				
Investment-grade	\$ 5,768	\$ 13,717	\$ 27,904	\$ 14,953
Non-investment-grade	1,009	5,314	11,374	5,769
Warehouse financing	46	1,067	460	1,575
<b>Total commitments to extend credit</b>	<b>6,823</b>	<b>20,098</b>	<b>39,738</b>	<b>22,297</b>
Contingent and forward starting				
resale agreements	767	2	-	-
Forward starting repurchase and secured				
lending agreements	239	-	-	-
Investment commitments	6	3	-	629
Other	404	-	-	-
<b>Total commitments</b>	<b>\$ 8,239</b>	<b>\$ 20,103</b>	<b>\$ 39,738</b>	<b>\$ 22,926</b>

##### Commitments to Extend Credit

The Bank's commitments to extend credit are agreements to lend with fixed termination dates and depend on the satisfaction of all contractual conditions to borrowing. These commitments are presented net of amounts syndicated to third parties. The total commitment amount does not necessarily reflect actual future cash flows because the Bank may syndicate all or substantial additional portions of these commitments. In addition, commitments can expire unused or be reduced or cancelled at the counterparty's request.

As of June 2016 and December 2015, \$77.30 billion and \$77.98 billion, respectively, of the Bank's lending commitments were held for investment and were accounted for on an accrual basis. See Note 9 for further information about such commitments. In addition, as of June 2016 and December 2015, \$5.16 billion and \$7.01 billion, respectively of the Bank's lending commitments were held for sale and were accounted for at the lower of cost or fair value.

The Bank accounts for the remaining commitments to extend credit at fair value. Losses, if any, are generally recorded, net of any fees in "Gains and losses from financial instruments, net."

## Notes to Condensed Consolidated Financial Statements (Unaudited)

**Commercial Lending.** The Bank's commercial lending commitments are extended to investment-grade and non-investment-grade corporate borrowers. Commitments to investment-grade corporate borrowers are principally used for operating liquidity and general corporate purposes. The Bank also extends lending commitments in connection with contingent acquisition financing and other types of corporate lending as well as commercial real estate financing. Commitments that are extended for contingent acquisition financing are often intended to be short-term in nature, as borrowers often seek to replace them with other funding sources.

Sumitomo Mitsui Financial Group, Inc. (SMFG) provides the Bank and its affiliates with credit loss protection on certain approved loan commitments (primarily investment-grade commercial lending commitments). The notional amount of such loan commitments was \$27.23 billion and \$27.03 billion as of June 2016 and December 2015, respectively, substantially all of which resides in the Bank. The credit loss protection on loan commitments provided by SMFG is generally limited to 95% of the first loss the Bank and its affiliates realize on such commitments, up to a maximum of approximately \$950 million. In addition, subject to the satisfaction of certain conditions, upon the Bank's request, SMFG will provide protection for 70% of additional losses on such commitments, up to a maximum of \$1.13 billion, of which \$768 million of protection had been provided as of both June 2016 and December 2015. The Bank also uses other financial instruments to mitigate credit risks related to certain commitments not covered by SMFG. These instruments primarily include credit default swaps that reference the same or similar underlying instrument or entity, or credit default swaps that reference a market index.

**Warehouse Financing.** The Bank provides financing to clients who warehouse financial assets. These arrangements are secured by the warehoused assets, primarily consisting of consumer and corporate loans.

### Contingent and Forward Starting Resale Agreements/Forward Starting Repurchase Agreements

The Bank enters into resale agreements and repurchase agreements that settle at a future date, generally within three business days. The Bank also enters into commitments to provide contingent financing to its clients and counterparties through resale agreements. The Bank's funding of these commitments depends on the satisfaction of all contractual conditions to the resale agreement and these commitments can expire unused.

### Investment Commitments

The Bank's investment commitments consist of commitments to invest in securities, real estate and other assets.

### Contingencies

**Legal Proceedings.** See below and Note 22 for information about legal proceedings.

**Certain Mortgage-Related Contingencies.** There are multiple areas of focus by regulators, governmental agencies and others within the mortgage market that may impact originators, issuers, servicers and investors. There remains significant uncertainty surrounding the nature and extent of any potential exposure for participants in this market.

**Representations and Warranties.** Substantially all of the activity described below, with respect to representations and warranties, occurred prior to the November 2008 reorganization of the Bank. Any losses incurred within the entities contributed during the reorganization are thus reimbursed under the Guarantee (see Note 18 for additional information about the Guarantee). As such, there will not be an impact to the continuing operations or results of the Bank with respect to these matters.

The Bank has not been a significant originator of residential mortgage loans. The Bank did purchase loans originated by others and generally received loan-level representations. During the period 2005 through 2008, the Bank sold approximately \$10 billion of loans to government-sponsored enterprises and approximately \$11 billion of loans to other third parties. In addition, the Bank transferred loans to trusts and other mortgage securitization vehicles.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

In connection with both sales of loans and securitizations, the Bank provided loan-level representations and/or assigned the loan-level representations from the party from whom the Bank purchased the loans.

The Bank's exposure to claims for repurchase of residential mortgage loans based on alleged breaches of representations will depend on a number of factors such as the extent to which these claims are made within the statute of limitations taking into consideration the agreements to toll the statute of limitations the Bank has entered into with trustees representing trusts. Based upon the large number of defaults in residential mortgages, including those sold or securitized by the Bank, there is a potential for repurchase claims. However, the Bank is not in a position to make a meaningful estimate of that exposure at this time.

### Guarantees

The table below presents information about certain derivatives that meet the definition of a guarantee, securities lending indemnifications and certain other guarantees.

<i>\$ in millions</i>	Derivatives	Securities lending indemnifications	Other financial guarantees
<b>As of June 2016</b>			
<b>Carrying Value of</b>			
Net Liability	\$ 2,044	\$ -	\$ 70
<b>Maximum Payout/Notional Amount by Period of Expiration</b>			
2016	\$ 155,377	\$ 33,224	\$ 31
2017 - 2018	45,756	-	663
2019 - 2020	24,507	-	630
2021 - Thereafter	8,301	-	247
<b>Total</b>	<b>\$ 233,941</b>	<b>\$ 33,224</b>	<b>\$ 1,571</b>

### As of December 2015

<i>\$ in millions</i>	Derivatives	Securities lending indemnifications	Other financial guarantees
<b>Carrying Value of</b>			
Net Liability	\$ 1,363	\$ -	\$ 1
<b>Maximum Payout/Notional Amount by Period of Expiration</b>			
2016	\$ 49,816	\$ 37,256	\$ 124
2017 - 2018	22,817	-	976
2019 - 2020	18,978	-	663
2021 - Thereafter	4,835	-	656
<b>Total</b>	<b>\$ 96,446</b>	<b>\$ 37,256</b>	<b>\$ 2,419</b>

In the table above:

- The maximum payout is based on the notional amount of the contract and does not represent anticipated losses.
- Amounts exclude certain commitments to issue standby letters of credit that are included in "Commitments to extend credit." See the tables in "Commitments" above for a summary of the Bank's commitments.

**Derivative Guarantees.** The Bank enters into various derivatives that meet the definition of a guarantee under U.S. GAAP, including written currency contracts and interest rate caps, floors and swaptions. These derivatives are risk managed together with derivatives that do not meet the definition of a guarantee, and therefore the amounts in the table above do not reflect the Bank's overall risk related to its derivative activities. Disclosures about derivatives are not required if they may be cash settled and the Bank has no basis to conclude it is probable that the counterparties held the underlying instruments at inception of the contract. The Bank has concluded that these conditions have been met for certain large, internationally active commercial and investment bank counterparties, central clearing counterparties and certain other counterparties. Accordingly, the Bank has not included such contracts in the tables above. In addition, see Note 7 for information about credit derivatives that meet the definition of a guarantee, which are not included in the tables above.

Derivatives are accounted for at fair value and therefore the carrying value is considered the best indication of payment/performance risk for individual contracts. However, the carrying values in the table above exclude the effect of counterparty and cash collateral netting.

**Securities Lending Indemnifications.** The Bank, in its capacity as an agency lender, indemnifies most of its securities lending customers against losses incurred in the event that borrowers do not return securities and the collateral held is insufficient to cover the market value of the securities borrowed. Collateral held by the lenders in connection with securities lending indemnifications was \$34.15 billion and \$38.27 billion as of June 2016 and December 2015, respectively. Because the contractual nature of these arrangements requires the Bank to obtain collateral with a market value that exceeds the value of the securities lent to the borrower, there is minimal performance risk associated with these guarantees.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

**Other Financial Guarantees.** In the ordinary course of business, the Bank provides other financial guarantees of the obligations of third parties (e.g., standby letters of credit and other guarantees to enable clients to complete transactions). These guarantees represent obligations to make payments to beneficiaries if the guaranteed party fails to fulfill its obligation under a contractual arrangement with that beneficiary.

**Other Representations, Warranties and Indemnifications.** The Bank provides representations and warranties to counterparties in connection with a variety of commercial transactions and occasionally indemnifies them against potential losses caused by the breach of those representations and warranties. The Bank may also provide indemnifications protecting against changes in or adverse application of certain U.S. tax laws in connection with ordinary-course transactions such as borrowings or derivatives.

In addition, the Bank may provide indemnifications to some counterparties to protect them in the event additional taxes are owed or payments are withheld, due either to a change in or an adverse application of certain non-U.S. tax laws.

These indemnifications generally are standard contractual terms and are entered into in the ordinary course of business. Generally, there are no stated or notional amounts included in these indemnifications, and the contingencies triggering the obligation to indemnify are not expected to occur. The Bank is unable to develop an estimate of the maximum payout under these guarantees and indemnifications. However, management believes that it is unlikely the Bank will have to make any material payments under these arrangements, and no material liabilities related to these arrangements have been recognized in the condensed consolidated statements of financial condition as of June 2016 and December 2015.

### Note 17.

#### Regulation and Capital Adequacy

The Bank is regulated as described in Note 1, and is subject to consolidated regulatory capital requirements as described below. For purposes of assessing the adequacy of its capital, the Bank calculates its capital requirements in accordance with the revised risk-based capital and leverage regulations applicable to state member banks which are based on the Federal Reserve Board's revised risk-based capital and leverage regulations, subject to certain transitional provisions (Revised Capital Framework).

The risk-based capital requirements are expressed as capital ratios that compare measures of regulatory capital to risk-weighted assets (RWAs). Failure to comply with these capital requirements could result in restrictions being imposed by the Bank's regulators. The Bank's capital levels are also subject to qualitative judgments by the regulators about components of capital, risk weightings and other factors.

#### Capital Framework

The regulations under the Revised Capital Framework are largely based on the Basel Committee's final capital framework for strengthening international capital standards (Basel III) and also implement certain provisions of the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act). Under the Revised Capital Framework, the Bank is an "Advanced approach" banking organization.

The Bank calculates its Common Equity Tier 1 (CET1), Tier 1 capital and Total capital ratios in accordance with (i) the Standardized approach and market risk rules set out in the Revised Capital Framework (together, the Standardized Capital Rules) and (ii) the Advanced approach and market risk rules set out in the Revised Capital Framework (together, the Basel III Advanced Rules). The lower of each ratio calculated in (i) and (ii) is the ratio against which the Bank's compliance with its minimum ratio requirements is assessed. Each of the ratios calculated in accordance with the Standardized Capital Rules was lower than that calculated in accordance with the Basel III Advanced Rules and therefore the Standardized Capital ratios were the ratios that applied to the Bank as of June 2016 and December 2015. The capital ratios that apply to the Bank can change in future reporting periods as a result of these regulatory requirements.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

**Regulatory Capital and Capital Ratios.** The U.S. Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), among other things, requires the federal bank regulatory agencies to take “prompt corrective action” (PCA) in respect of depository institutions that do not meet specified capital requirements. FDICIA establishes five capital categories for FDIC-insured banks: well-capitalized, adequately capitalized, undercapitalized, significantly undercapitalized and critically undercapitalized.

Under the regulatory framework for prompt corrective action applicable to the Bank, in order to meet the quantitative requirements for being a “well-capitalized” depository institution, the Bank must meet higher minimum requirements than the minimum ratios in the table below. The table below presents the minimum ratios and “well-capitalized” minimum ratios required for the Bank.

	Minimum Ratio as of		"Well-capitalized"	
	June 2016	December 2015	Minimum Ratio	
CET1 ratio	5.125%	4.5%	6.5%	
Tier 1 capital ratio	6.625%	6.0%	8.0%	
Total capital ratio	8.625%	8.0%	10.0%	
Tier 1 leverage ratio	4.000%	4.0%	5.0%	

The Bank was in compliance with its minimum capital requirements and the “well capitalized” minimum ratios as of June 2016 and December 2015. The Bank’s capital levels and prompt corrective action classification are also subject to qualitative judgements by the regulators about components of capital, risk weightings and other factors. Failure to comply with these capital requirements, including a breach of the buffers discussed below, could result in restrictions being imposed by the Bank’s regulators.

In the table above:

- The minimum ratios as of June 2016 reflect the 25% phase-in of the capital conservation buffer (0.625%), and the counter-cyclical capital buffer (0%) described below.
- Tier 1 leverage ratio is defined as Tier 1 capital divided by quarterly average adjusted total assets (which includes adjustments for goodwill and identifiable intangible assets).

Certain aspects of the Revised Capital Framework’s requirements phase in over time (transitional provisions). These include capital buffers. The minimum CET1, Tier 1 and Total capital ratios that apply to the Bank will increase as the capital buffers are phased in.

The capital conservation buffer, which consists entirely of capital that qualifies as CET1, began to phase in on January 1, 2016 and will continue to do so in increments of 0.625% per year until it reaches 2.5% of RWAs on January 1, 2019.

The Revised Capital Framework also provides for a counter-cyclical capital buffer, which is an extension of the capital conservation buffer, of up to 2.5% (consisting entirely of CET1) intended to counteract excessive credit growth. As of June 2016 the Federal Reserve Board has set the counter-cyclical capital buffer at 0%.

Failure to meet the capital levels inclusive of the buffers could result in limitations on the Bank’s ability to distribute capital, including dividend payments, and to make certain discretionary compensation payments.

**Definition of Risk-Weighted Assets.** RWAs are calculated in accordance with both the Standardized Capital Rules and the Basel III Advanced Rules. The following is a comparison of RWA calculations under these rules:

- RWAs for credit risk in accordance with the Standardized Capital Rules are calculated in a different manner than the Basel III Advanced Rules. The primary difference is that the Standardized Capital Rules do not contemplate the use of internal models to compute exposure for credit risk on derivatives and securities financing transactions, whereas the Basel III Advanced Rules permit the use of such models, subject to supervisory approval. In addition, credit RWAs calculated in accordance with the Standardized Capital Rules utilize prescribed risk-weights which depend largely on the type of counterparty, rather than on internal assessments of the creditworthiness of such counterparties;
- RWAs for market risk in accordance with the Standardized Capital Rules and the Basel III Advanced Rules are generally consistent; and
- RWAs for operational risk are not required by the Standardized Capital Rules, whereas the Basel III Advanced Rules do include such a requirement.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

**Regulatory Capital Ratios and RWAs.** Each of the ratios calculated in accordance with the Standardized Capital Rules was lower than that calculated in accordance with the Basel III Advanced Rules, and therefore the Standardized Capital ratios were the ratios that applied to Bank as of June 2016 and December 2015.

The table below presents the ratios for the Bank calculated in accordance with both the Standardized and Basel III Advanced Rules.

\$ in millions	As of	
	June 2016	December 2015
<b>Standardized</b>		
Common Equity Tier 1	\$ 23,727	\$ 23,017
Tier 1 capital	23,727	23,017
Tier 2 capital	2,406	2,311
<b>Total capital</b>	<b>\$ 26,133</b>	<b>\$ 25,328</b>
<b>Basel III Advanced</b>		
Common Equity Tier 1	\$ 23,727	\$ 23,017
Tier 1 capital	23,727	23,017
Standardized Tier 2 capital	2,406	2,311
Allowance for losses on loans and lending commitments	(406)	(311)
Other adjustments	47	—
Tier 2 capital	2,047	2,000
<b>Total capital</b>	<b>\$ 25,774</b>	<b>\$ 25,017</b>
<b>RWAs</b>		
Standardized	\$ 194,974	\$ 202,197
Basel III Advanced	129,204	131,059
<b>CET1 ratio</b>		
Standardized	12.2%	11.4%
Basel III Advanced	18.4%	17.6%
<b>Tier 1 capital ratio</b>		
Standardized	12.2%	11.4%
Basel III Advanced	18.4%	17.6%
<b>Total capital ratio</b>		
Standardized	13.4%	12.5%
Basel III Advanced	19.9%	19.1%
Tier 1 leverage ratio	14.7%	16.4%

The increase in the Bank's Standardized capital ratios from December 2015 to June 2016 is primarily due to a decrease in credit RWAs, reflecting a decrease in derivatives and lending exposures, as well as an increase in Common Equity Tier 1 capital. The increase in the Bank's Basel III Advanced capital ratios from December 2015 to June 2016 is primarily due to an increase in Common Equity Tier 1 capital, as well as a decrease in market RWAs.

### Required Reserves

The deposits of the Bank are insured by the FDIC to the extent provided by law. The Federal Reserve Board requires that the Bank maintain cash reserves with the Federal Reserve Bank of New York. The amount deposited by the Bank held at the Federal Reserve Bank of New York was \$72.35 billion and \$49.36 billion as of June 2016 and December 2015, respectively, which exceeded regulatory reserve requirements of \$105 million and \$110 million by \$72.24 billion and \$49.25 billion as of June 2016 and December 2015, respectively. The increase in the amount deposited by the Bank held at the Federal Reserve Bank of New York is primarily a result of the acquisition of GE Capital Bank's online deposit platform in April 2016. See Note 13 for further information about this acquisition.

### Note 18.

#### Transactions with Related Parties

Transactions between the Bank and Group Inc. and its subsidiaries and affiliates are regulated by the Federal Reserve Board. These regulations generally limit the types and amounts of transactions (including credit extensions from the Bank) that may take place and generally require those transactions to be on terms that are at least as favorable to the Bank as prevailing terms for comparable transactions with non-affiliates. These regulations generally do not apply to transactions between the Bank and its subsidiaries.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

The table below presents amounts outstanding to/from affiliates, as defined by U.S. GAAP.

\$ in millions	As of	
	June 2016	December 2015
<b>Assets</b>		
Cash	\$ 30	\$ 30
Securities purchased under agreements to resell, at fair value	472	200
Receivables from customers and counterparties, brokers, dealers and clearing organizations	2,298	2,154
Financial instruments owned, at fair value	627	1,132
Other assets	308	399
<b>Total</b>	<b>\$ 3,735</b>	<b>\$ 3,915</b>
<b>Liabilities</b>		
Deposits due to affiliates	\$ 8,106	\$ 6,215
Securities sold under agreements to repurchase, at fair value	3,294	3,421
Payables to customers and counterparties, brokers, dealers and clearing organizations	427	336
Financial instruments sold, but not yet purchased at fair value	780	1,376
Unsecured borrowings (includes \$178 and \$37 at fair value as of June 2016 and December 2015)	2,182	2,098
Other liabilities and accrued expenses	302	970
<b>Total</b>	<b>\$ 15,091</b>	<b>\$ 14,416</b>

### Group Inc. Guarantee Agreement

In November 2008, Group Inc. executed a reorganization of the Bank which involved the transfer of assets and operations to the Bank. In connection with this transfer, Group Inc. entered into the Guarantee with the Bank whereby Group Inc. agreed to (i) purchase from the Bank certain transferred assets or reimburse the Bank for certain losses relating to those assets; (ii) reimburse the Bank for credit-related losses from assets transferred to the Bank; and (iii) protect the Bank or reimburse it for certain losses arising from derivatives and mortgage servicing rights transferred to the Bank. Beginning November 28, 2013, the provisions of the Guarantee relating to derivatives transferred into the Bank were no longer in effect. The other provisions of the Guarantee were still in effect as of June 2016. The Bank accounts for certain portions of the Guarantee as a derivative contract under U.S. GAAP; other components are accounted for as a receivable from affiliate.

As of both June 2016 and December 2015, the amount of the Guarantee recorded as a receivable in "Financial instruments owned, at fair value" was immaterial.

The Bank recorded an immaterial amount in "Gains and losses from financial instruments, net" associated with representations and warranties made by the Bank prior to the Bank's reorganization. See Note 16 for further discussion and contingencies associated with such representations and warranties.

### Interest Income and Expense

The Bank recognizes interest income and interest expense in connection with various affiliated transactions. These transactions include securities purchased under agreements to resell, securities sold under agreements to repurchase, deposits due to affiliates, other liabilities and accrued expenses, and subordinated borrowings.

The Bank recognized net interest expense from affiliates of \$14 million and \$46 million for the six months ended June 2016 and June 2015, respectively.

### Other Transactions

The Bank enters into various activities with affiliated entities and allocates revenues to, and receives revenues from, such affiliates for their participation. The Bank allocated net revenues to affiliates of \$349 million and \$814 million for the six months ended June 2016 and June 2015, respectively. These amounts are included in "Gains and losses from financial instruments, net."

The Bank is subject to service charges from affiliates. The Bank reimbursed affiliates \$250 million and \$280 million for the six months ended June 2016 and June 2015, respectively, for services rendered. These amounts are included in "Service charges."

The Bank enters into derivative contracts with Group Inc. and its affiliates in the normal course of business. As of June 2016 and December 2015, the net outstanding derivative contracts with Group Inc. and affiliates totaled \$627 million and \$1.13 billion, respectively, in "Financial instruments owned, at fair value," and \$774 million and \$1.37 billion, respectively, in "Financial instruments sold, but not yet purchased, at fair value."

In connection with its partnership interest in MMDP, the Bank has provided to Mitsui Sumitomo additional protection in the form of assets held in a VIE which could be liquidated for the benefit of Mitsui Sumitomo under certain circumstances.



## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Equity Transactions

During the six months ended June 2016 and June 2015, there were no capital contributions and no dividends between the Bank and Group Inc.

### Note 19.

#### Interest Income and Interest Expense

Interest is recorded over the life of the investment on an accrual basis based on contractual interest rates. The table below presents the Bank's sources of interest income and interest expense.

<i>\$ in millions</i>	Six Months Ended June	
	2016	2015
<b>Interest income</b>		
Deposits with banks	\$ 159	\$ 60
Securities purchased under agreements to resell	65	30
Financial instruments owned, at fair value	402	452
Loans receivable	540	391
Other interest	136	29
<b>Total interest income</b>	<b>1,302</b>	<b>962</b>
<b>Interest expense</b>		
Deposits	358	166
Securities sold under agreement to repurchase	10	-
Financial instruments sold, but not yet purchased, at fair value	20	16
Borrowings	35	29
Other interest	114	91
<b>Total interest expense</b>	<b>537</b>	<b>302</b>
<b>Net interest income</b>	<b>\$ 765</b>	<b>\$ 660</b>

In the table above:

- Other interest income includes interest income on collateral balances posted to counterparties, loans accounted for as held for sale and other interest-earning assets.
- Interest expense from borrowings primarily relates to net interest incurred on the Bank's affiliate borrowing from Group Inc. and other secured financings.
- Other interest expense includes interest expense on collateral balances received from counterparties and on funding facilities, primarily from affiliates.

### Note 20.

#### Income Taxes

##### Provision for Income Taxes

Income taxes are provided for using the asset and liability method under which deferred tax assets and liabilities are recognized for temporary differences between the financial reporting and tax bases of assets and liabilities. The Bank reports interest expense related to income tax matters in "Provision for taxes" and income tax penalties in "Other expenses."

The Bank's results of operations are included in the consolidated federal and certain state tax returns of GS Group. The Bank computes its tax liability as if it was filing a tax return on a modified separate company basis and settles such liability with Group Inc. pursuant to a tax sharing agreement. To the extent the Bank generates tax benefits from losses, it will be reimbursed by Group Inc. pursuant to a tax sharing agreement at such time as GS Group would have been able to utilize such losses.

##### Deferred Income Taxes

Deferred income taxes reflect the net tax effects of temporary differences between the financial reporting and tax bases of assets and liabilities. These temporary differences result in taxable or deductible amounts in future years and are measured using the tax rates and laws that will be in effect when such differences are expected to reverse. Valuation allowances are established to reduce deferred tax assets to the amount that more likely than not will be realized. As of June 2016 and December 2015, the Bank did not record a valuation allowance. Tax assets and liabilities are presented as a component of "Other assets" and "Other liabilities and accrued expenses," respectively.

##### Unrecognized Tax Benefits

The Bank recognizes tax positions in the condensed consolidated financial statements only when it is more likely than not that the position will be sustained on examination by the relevant taxing authority based on the technical merits of the position. A position that meets this standard is measured at the largest amount of benefit that will more likely than not be realized on settlement. A liability is established for differences between positions taken in a tax return and amounts recognized in the condensed consolidated financial statements.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Regulatory Tax Examinations

The Bank is subject to examination by the U.S. Internal Revenue Service (IRS) and other taxing authorities in jurisdictions where the Bank has significant business operations, such as New York State and City. The tax years under examination vary by jurisdiction.

During the six months ended June 2016, the Joint Committee on Taxation finalized its review of the U.S. Federal examinations of GS Group for fiscal 2008 through calendar 2010. The examinations of 2011 and 2012 began in 2013.

GS Group has been accepted into the Compliance Assurance Process program by the IRS for each of the tax years from 2013 and through 2016. This program allows GS Group to work with the IRS to identify and resolve potential U.S. federal tax issues before the filing of tax returns. The 2013 tax year is the first year that was examined under the program, and 2013 and 2014 remain subject to post-filing review.

New York State examinations of 2011 through 2014 began in 2015.

During the six months ended June 2016, New York City examinations of 2011 through 2014 were finalized. The completion of these audits had a material impact on the Bank's effective tax rate for the six months ended June 2016.

All years including and subsequent to 2007 for all states in which the Bank is included in a combined tax filing remain open to examination by the taxing authorities.

All years including and subsequent to the years detailed above remain open to examination by the taxing authorities. The Bank believes that the liability for unrecognized tax benefits it has established is adequate in relation to the potential for additional assessments.

### Note 21.

#### Credit Concentrations

Credit concentrations may arise from the Bank's lending, market-making and other activities and may be impacted by changes in economic, industry or political factors. The Bank seeks to mitigate credit risk by actively monitoring exposures and obtaining collateral from counterparties as deemed appropriate.

While the Bank's activities expose it to many different industries and counterparties, the Bank routinely executes a high volume of transactions with asset managers, investment funds, commercial banks, brokers and dealers, clearing houses and exchanges, which results in significant credit concentrations.

In the ordinary course of business, the Bank may also be subject to a concentration of credit risk to a particular counterparty, borrower or issuer, including sovereign issuers, or to a particular clearing house or exchange.

As of June 2016 and December 2015, the Bank had exposure of \$12.09 billion or 7.5% of total assets, and \$14.71 billion or 10.9% of total assets, respectively, related to U.S. government and federal agency obligations. These are included in "Financial instruments owned, at fair value." As of June 2016 and December 2015, the Bank did not have credit exposure to any other counterparty that exceeded 2% of total assets.

To reduce credit exposures, the Bank may enter into agreements with counterparties that permit the Bank to offset receivables and payables with such counterparties and/or enable the Bank to obtain collateral on an upfront or contingent basis. Collateral obtained by the Bank related to derivative assets is principally cash and is held by the Bank or a third-party custodian. Collateral obtained by the Bank related to resale agreements is primarily U.S. government and federal agency obligations. See Note 10 for further information about collateralized agreements and financings.

The Bank had \$3.04 billion and \$3.23 billion of U.S. government and federal agency obligations that collateralize resale agreements as of June 2016 and December 2015, respectively. Because the Bank's primary credit exposure on such transactions is to the counterparty to the transaction, the Bank would be exposed to the collateral issuer only in the event of counterparty default.

## Notes to Condensed Consolidated Financial Statements (Unaudited)

### Note 22.

#### Legal Proceedings

The Bank is involved in a number of judicial, regulatory and other proceedings (including those described below) concerning matters arising in connection with the conduct of the Bank's businesses. Many of these proceedings are in early stages, and many of these cases seek an indeterminate amount of damages. For certain proceedings, however, the Bank expects that it would receive reimbursement from Group Inc. under the Guarantee agreement (see Note 18).

With respect to the matters described below, management is unable to estimate a range of reasonably possible loss for matters in which the Bank is involved due to various factors, including (i) actual or potential plaintiffs have not claimed an amount of money damages, except in those instances where management can otherwise determine an appropriate amount; (ii) the matters are in early stages; (iii) matters relate to regulatory investigations or reviews, except in those instances where management can otherwise determine an appropriate amount, (iv) there is uncertainty as to the likelihood of a class being certified or the ultimate size of the class; (v) there is uncertainty as to the outcome of pending appeals or motions; (vi) there are significant factual issues to be resolved; and/or (vii) there are novel legal issues presented. Management does not believe, based on currently available information, that the outcomes of any matters will have a material adverse effect on the Bank's financial condition, though the outcomes could be material to the Bank's operating results for any particular period, depending, in part, upon the operating results for such period. Matters that the Bank is involved in include but are not limited to the following:

- **Interest Rate Swap Antitrust Litigation.** The Bank and certain affiliates of the Bank (including Group Inc.) are among the defendants named in putative antitrust class actions relating to the trading of interest rate swaps, filed beginning in November 2015 and consolidated in the U.S. District Courts for the Southern District of New York. The complaints generally allege, on behalf of purchasers of interest rate swaps, a conspiracy among the dealers and brokers since at least January 1, 2007 to preclude exchange trading of interest rate swaps. The complaints seek declaratory and injunctive relief as well as treble damages in an unspecified amount.

The Bank and certain affiliates of the Bank (including Group Inc.) are among the defendants named in antitrust actions relating to the trading of interest rate swaps filed in the U.S. District Court for the Southern District of New York beginning in April 2016 by operators of swap execution facilities and certain of their affiliates. The complaints generally assert claims under federal and state antitrust laws and state common law in connection with an alleged conspiracy among the defendants to preclude trading of interest rate swaps on the plaintiffs' respective swap execution facilities and seek declaratory and injunctive relief as well as treble damages in an unspecified amount. These actions have been consolidated with the class action described above for pretrial proceedings.

- **Regulatory Investigations and Reviews and Related Litigation.** The Bank and certain of its affiliates (including Group Inc.) are subject to a number of investigations and reviews by, and in some cases have received subpoenas and requests for documents and information from, various governmental and regulatory bodies and self-regulatory organizations and litigation relating to such matters in each case relating to the Bank's businesses and operations, including, but not limited to residential mortgage lending and compliance with related consumer laws; the sales, trading, execution and clearance of derivatives, currencies and other financial products and related communications and activities, including trading activities and communications in connection with the establishment of benchmark rates in both currency and interest rate swap markets and activities in U.S. Treasury securities; and transactions involving government-related financings and other matters, including those related to 1Malaysia Development Berhad (1MDB), a sovereign wealth fund in Malaysia. The Bank is cooperating with all such regulatory investigations and reviews.

In addition, investigations, reviews and litigation involving the Bank's affiliates and such affiliates' businesses and operations, including without limitation various matters referred to above, may have an impact on the Bank's businesses and operations.

**Notes to Condensed Consolidated Financial Statements  
(Unaudited)**

**Note 23.**

**Subsequent Events**

The Bank evaluated subsequent events through August 17, 2016, the date the condensed consolidated financial statements were issued, and determined that there were no material events or transactions that would require recognition or disclosure in these condensed consolidated financial statements.



## Independent Auditor's Report

To the Board of Directors and Shareholder of Goldman Sachs Bank USA

We have reviewed the accompanying condensed consolidated statement of financial condition of Goldman Sachs Bank USA and its subsidiaries (the "Bank") as of June 30, 2016, the related condensed consolidated statements of earnings for the six months ended June 30, 2016 and 2015, the condensed consolidated statement of changes in shareholder's equity for the six months ended June 30, 2016, and the condensed consolidated statements of cash flows for the six months ended June 30, 2016 and 2015.

### ***Management's Responsibility for the Condensed Consolidated Interim Financial Information***

The Bank's management is responsible for the preparation and fair presentation of the condensed consolidated interim financial information in accordance with accounting principles generally accepted in the United States of America; this responsibility includes the design, implementation, and maintenance of internal control sufficient to provide a reasonable basis for the preparation and fair presentation of the condensed consolidated interim financial information in accordance with accounting principles generally accepted in the United States of America.

### ***Auditor's Responsibility***

Our responsibility is to conduct our review in accordance with auditing standards generally accepted in the United States of America applicable to reviews of interim financial information. A review of interim financial information consists principally of applying analytical procedures and making inquiries of persons responsible for financial and accounting matters. It is substantially less in scope than an audit conducted in accordance with auditing standards generally accepted in the United States of America, the objective of which is the expression of an opinion regarding the financial information taken as a whole. Accordingly, we do not express such an opinion.

### ***Conclusion***

Based on our review, we are not aware of any material modifications that should be made to the accompanying condensed consolidated interim financial information for it to be in accordance with accounting principles generally accepted in the United States of America.

### ***Other Matters***

We have previously audited, in accordance with auditing standards generally accepted in the United States of America, the consolidated statement of financial condition as of December 31, 2015, and the related consolidated statements of earnings, changes in shareholder's equity and cash flows for the year then ended (not presented herein), and we expressed an unqualified audit opinion on those audited consolidated financial statements in our report dated April 26, 2016. In our opinion, the information set forth in the accompanying condensed consolidated statement of financial condition as of December 31, 2015, and the condensed consolidated statement of changes in shareholder's equity for the year ended December 31, 2015, is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

*PricewaterhouseCoopers LLP*

August 17, 2016

## Part II. Management's Discussion and Analysis of Financial Condition and Results of Operations

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## Management's Discussion and Analysis

### Introduction

Goldman Sachs Bank USA, together with its consolidated subsidiaries (collectively, the Bank), is a New York State-chartered bank and a member of the Federal Reserve System. It is supervised by the Board of Governors of the Federal Reserve System (Federal Reserve Board), the New York State Department of Financial Services (NYSDFS) and the Consumer Financial Protection Bureau (CFPB) and is a member of the Federal Deposit Insurance Corporation (FDIC). The Bank's deposits are insured by the FDIC up to the maximum amount permitted by law. As a registered swap dealer, the Bank is also regulated by the U.S. Commodity Futures Trading Commission (CFTC). The Bank is also registered as a government securities dealer and is subject to the rules and regulations of the U.S. Department of the Treasury.

The Bank's principal office is located in New York, New York. The Bank operates one domestic branch located in Salt Lake City, Utah, which is regulated by the Utah Department of Financial Institutions. The Bank also operates a branch in London, United Kingdom (the London Branch), which is regulated by the Financial Conduct Authority and the Prudential Regulation Authority.

The Bank is a wholly-owned subsidiary of The Goldman Sachs Group, Inc. (Group Inc.). The Federal Reserve Board is the primary regulator of Group Inc., a bank holding company under the Bank Holding Company Act of 1956 (BHC Act) and a financial holding company under the amendments to the BHC Act effected by the U.S. Gramm Leach Bliley Act of 1999.

The Bank's primary activities include lending, derivative activities, and deposit taking. The Bank is a lender to private wealth management clients of Goldman, Sachs & Co. (GS&Co.), to institutional and corporate clients, and to retail customers. The Bank enters into interest rate, credit, currency and other derivatives and related products for the purpose of market making and risk management. The Bank accepts deposits from private wealth management clients, online retail customers and deposit sweep programs and issues brokered certificates of deposits.

This Management's Discussion and Analysis of Financial Condition and Results of Operations should be read in conjunction with our Annual Report for the year ended December 31, 2015. References to "the 2015 Annual Report" are to our Annual Report for the year ended December 31, 2015.

The 2015 Annual Report includes information relating to the Bank's business, the supervision and regulation to which it is subject, risk factors affecting its business, results of operations and financial condition, and the 2015 and 2014 consolidated financial statements of the Bank.

When we use the terms "the Bank," "we," "us," and "our," we mean Goldman Sachs Bank USA and its consolidated subsidiaries. When we use the term "GS Group," or "firmwide" we are referring to Group Inc. and its consolidated subsidiaries, including the Bank.

References to revenue-producing units and control and support functions include activities performed by the Bank's employees, dual employees (who are employees who perform services for both the Bank and another Group Inc. affiliate) and by affiliate employees under Bank supervision pursuant to a Master Services Agreement supplemented by service level agreements (collectively, "SLAs") between the Bank and its affiliates.

References to "this Semi-Annual Report," of which this Management's Discussion and Analysis forms a part, refers to the report dated August 17, 2016, as may be amended, and includes information relating to the Bank's results of operations and financial condition, as well as the condensed consolidated financial statements of the Bank.

References to "the condensed consolidated financial statements" are to Part I of this Semi-Annual Report. All references to June 2016 and June 2015 refer to our periods ended, or the dates, as the context requires, June 30, 2016 and June 30, 2015, respectively. All references to December 2015 refer to the date December 31, 2015. Any reference to a future year refers to a year ending on December 31 of that year. Certain reclassifications have been made to previously reported amounts to conform to the current presentation.

### Executive Overview

The Bank generated net earnings of \$712 million for the first half of 2016, essentially unchanged compared with \$706 million for the first half of 2015.

Net revenues, including net interest income, were \$1.57 billion for the first half of 2016, a decrease of 3% compared with \$1.62 billion for the first half of 2015, reflecting a higher provision for losses on loans and lending commitments and lower net gains from financial instruments, partially offset by higher net interest income.

## Management's Discussion and Analysis

Net interest income was \$765 million for the first half of 2016, an increase of 16% compared with \$660 million for the first half of 2015, driven by growth in lending, primarily to corporate and private wealth management clients, and in cash deposits held at banks, partially offset by higher interest expense on higher average deposit balances primarily due to the acquisition of GE Capital Bank's online deposit platform.

Operating expenses were \$502 million for the first half of 2016, an increase of 5% compared with \$479 million for the first half of 2015, reflecting higher compensation and benefits and other expenses, partially offset by a decrease in service charges reflecting an increase in total staff primarily related to new business initiatives.

Net interest margin was 110 basis points for the first half of 2016, a decrease of 4 basis points compared with 114 basis points for the first half of 2015, primarily driven by increased excess liquidity that had yet to be deployed.

Total assets were \$160.67 billion as of June 2016, an increase of 19% compared with \$134.50 billion as of December 2015. This increase primarily reflected an increase in cash deposits from the acquisition of GE Capital Bank's online deposit platform in April 2016 and from private wealth management clients. See Note 13 to the condensed consolidated financial statements for further information about the GE Capital Bank transaction.

Our global core liquid assets (GCLA) was \$80.32 billion as of June 2016, compared with \$59.33 billion as of December 2015, driven by increases in cash deposits. See "Risk Management — Liquidity Risk Management — Liquidity Risk Management Principles — Global Core Liquid Assets" below for further information.

We continue to maintain strong capital ratios. As of June 2016, our Common Equity Tier 1 ratio as computed in accordance with the Standardized approach and the Basel III Advanced approach, in each case reflecting the applicable transitional provisions, was 12.2% and 18.4%, respectively.

See Note 17 to the condensed consolidated financial statements and "Equity Capital Management and Regulatory Capital" below for further information about our applicable capital ratios.

## Business Environment

### United States

In the United States, real gross domestic product (GDP) growth decreased compared with the second half of 2015, due in part to a decrease in the growth rate of total fixed investment. Measures of consumer confidence remained stable, while the pace of housing starts and home sales increased as compared with the second half of 2015. The unemployment rate was 4.9% as of June 2016, down slightly from 5.0% at the start of the year, and measures of inflation increased. The U.S. Federal Reserve kept its federal funds rate at a target range of 0.25% to 0.50%, and has indicated that it intends to monitor the continuing economic ramifications of a referendum that was passed for the United Kingdom to exit the European Union in late June 2016. The yield on the 10-year U.S. Treasury note ended June 2016 at 1.49%, 81 basis points lower than at the close of 2015. In equity markets, the S&P 500 Index and Dow Jones Industrial Average both increased by 3% in the first half of 2016, compared with the end of last year, while the NASDAQ Composite Index decreased by 3%. In the first half of 2016, there was significant tightening in U.S. credit spreads, with investment grade spreads tightening 11 bps and high yield spreads tightening 46 bps.

### Global

During the first half of 2016, global economic conditions appeared to be mixed compared with the second half of 2015 as real GDP growth appeared to increase in the Euro Area, Japan, and India, while growth slowed in the United Kingdom and China. The primary economic disruptions—in the first half of 2016 occurred in January with the Chinese Yuan devaluation and in late June when the U.K. referendum was passed. In the immediate days following the UK decision to leave the EU, volatility rose sharply, nearing its year-to-date peak, and global equity markets declined significantly. In addition, the British pound reached its lowest level against the U.S. dollar in over thirty years. While volatility ended June 2016 where it began the year and global equity markets reversed these losses in the last few days of the first half of 2016, investors continued to weigh the long-term economic impacts of this decision. The expectation of significant monetary easing from the Bank of England (BOE), Bank of Japan (BOJ), and the European Central Bank (ECB) contributed to a decline in global interest rates from already low levels. Early in 2016, the BOJ followed the ECB to become the second major central bank to introduce negative interest rates. The price of crude oil dropped significantly in the beginning of 2016 before increasing for most of the first half of 2016, briefly reaching \$50 per barrel (WTI) before declining slightly in late June 2016.



## Management's Discussion and Analysis

### Critical Accounting Policies

#### Loans Receivable

Loans receivable on the condensed consolidated statements of financial condition is comprised of:

- Loans held for investment that are accounted for at amortized cost net of allowance for loan losses. Interest on such loans is recognized over the life of the loan and is recorded on an accrual basis, and
- Loans held for sale which are accounted for at the lower of cost or market.

The Bank assesses its loans for impairment on an ongoing basis through its credit review process. A credit review is an independent analysis of the capacity and willingness of a borrower to meet its financial obligations, resulting in an internal credit rating. The Bank also assigns a regulatory risk rating to such loans based on the definitions provided by the U.S. federal bank regulatory agencies. Such loans are determined to be impaired when it is probable that the Bank will not be able to collect all principal and interest due under the contractual terms of the loan. At that time, loans are placed on non-accrual status, all accrued but uncollected interest is reversed against interest income, and interest subsequently collected is recognized on a cash basis to the extent the loan balance is deemed collectible. Otherwise all cash received is used to reduce the outstanding loan balance.

The Bank's allowance for loan losses is comprised of specific loan-level reserves and portfolio level reserves. Specific loan-level reserves are determined on loans that exhibit credit quality weakness and are therefore individually evaluated for impairment. Portfolio level reserves are determined on loans not deemed impaired by aggregating groups of loans with similar risk characteristics and estimating the probable loss inherent in the portfolio.

See Note 9 to the condensed consolidated financial statements for further information about loans receivable.

#### Fair Value

**Fair Value Hierarchy.** Financial instruments owned, at fair value and Financial instruments sold, but not yet purchased, at fair value (i.e., inventory), as well as certain other financial assets and financial liabilities, are reflected in our condensed consolidated statements of financial condition at fair value (i.e., marked-to-market), with related gains or losses generally recognized in our condensed consolidated statements of earnings.

The fair value of a financial instrument is the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. We measure certain financial assets and financial liabilities as a portfolio (i.e., based on its net exposure to market and/or credit risks). In determining fair value, the hierarchy under U.S. generally accepted accounting principles (U.S. GAAP) gives (i) the highest priority to unadjusted quoted prices in active markets for identical, unrestricted assets or liabilities (level 1 inputs), (ii) the next priority to inputs other than level 1 inputs that are observable, either directly or indirectly (level 2 inputs), and (iii) the lowest priority to inputs that cannot be observed in market activity (level 3 inputs). Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to their fair value measurement.

The fair values for substantially all of our financial assets and financial liabilities are based on observable prices and inputs and are classified in levels 1 and 2 of the fair value hierarchy. Certain level 2 and level 3 financial assets and financial liabilities may require appropriate valuation adjustments that a market participant would require to arrive at fair value for factors such as counterparty and the Bank or its affiliates' credit quality, funding risk, transfer restrictions, liquidity and bid/offer spreads.

Instruments categorized within level 3 of the fair value hierarchy are those which require one or more significant inputs that are not observable. As of both June 2016 and December 2015, level 3 financial assets represented 1.8% of our total assets. See Notes 5 through 8 to the condensed consolidated financial statements for further information about level 3 financial assets, including changes in level 3 financial assets and related fair value measurements. Absent evidence to the contrary, instruments classified within level 3 of the fair value hierarchy are initially valued at transaction price, which is considered to be the best initial estimate of fair value. Subsequent to the transaction date, we use other methodologies to determine fair value, which vary based on the type of instrument. Estimating the fair value of level 3 financial instruments requires judgments to be made. These judgments include:

- Determining the appropriate valuation methodology and/or model for each type of level 3 financial instrument;

## Management's Discussion and Analysis

- Determining model inputs based on an evaluation of all relevant empirical market data, including prices evidenced by market transactions, interest rates, credit spreads, volatilities and correlations; and
- Determining appropriate valuation adjustments, including those related to illiquidity or counterparty credit quality.

Regardless of the methodology, valuation inputs and assumptions are only changed when corroborated by substantive evidence.

### Controls Over Valuation of Financial Instruments

The Bank leverages GS Group's control infrastructure over valuation of financial instruments, which is described below. Market makers and investment professionals in revenue-producing units are responsible for pricing our financial instruments. GS Group's control infrastructure is independent of the revenue-producing units and is fundamental to ensuring that all of our financial instruments are appropriately valued at market-clearing levels. In the event that there is a difference of opinion in situations where estimating the fair value of financial instruments requires judgment (e.g., calibration to market comparables or trade comparison, as described below), the final valuation decision is made by senior managers in control and support functions. This independent price verification is critical to ensuring that our financial instruments are properly valued.

### Price Verification

All financial instruments at fair value in levels 1, 2 and 3 of the fair value hierarchy are subject to an independent price verification process. The objective of price verification is to have an informed and independent opinion with regard to the valuation of financial instruments under review. Instruments that have one or more significant inputs which cannot be corroborated by external market data are classified within level 3 of the fair value hierarchy. Price verification strategies utilized by our independent control and support functions include:

- **Trade Comparison.** Analysis of trade data (both internal and external where available) is used to determine the most relevant pricing inputs and valuations.
- **External Price Comparison.** Valuations and prices are compared to pricing data obtained from third parties (e.g., brokers or dealers, Markit, Bloomberg, IDC, TRACE). Data obtained from various sources is compared to ensure consistency and validity. When broker or dealer quotations or third-party pricing vendors are used for valuation or price verification, greater priority is generally given to executable quotations.

- **Calibration to Market Comparables.** Market-based transactions are used to corroborate the valuation of positions with similar characteristics, risks and components.
- **Relative Value Analyses.** Market-based transactions are analyzed to determine the similarity, measured in terms of risk, liquidity and return, of one instrument relative to another or, for a given instrument, of one maturity relative to another.
- **Collateral Analyses.** Margin calls on derivatives are analyzed to determine implied values which are used to corroborate our valuations.
- **Execution of Trades.** Where appropriate, trading desks are instructed to execute trades in order to provide evidence of market-clearing levels.
- **Backtesting.** Valuations are corroborated by comparison to values realized upon sales.

See Notes 5 through 8 to the condensed consolidated financial statements for further information about fair value measurements.

### Review of Net Revenues

Independent control and support functions ensure adherence to GS Group's pricing policy through a combination of daily procedures, including the explanation and attribution of net revenues based on the underlying factors. Through this process we independently validate net revenues, identify and resolve potential fair value or trade booking issues on a timely basis and seek to ensure that risks are being properly categorized and quantified.

### Review of Valuation Models

A model risk management group (Model Risk Management), consisting of quantitative professionals who are separate from model developers, performs an independent model review and validation process of valuation models. New or changed models are reviewed and approved prior to being put into use. Models are evaluated and re-approved annually to assess the impact of any changes in the product or market and any market developments in pricing theories. See "Risk Management — Model Risk Management" for further information about the review and validation of valuation models.

## Management's Discussion and Analysis

### Recent Accounting Developments

See Note 3 to the condensed consolidated financial statements for information about Recent Accounting Developments.

### Use of Estimates

The use of generally accepted accounting principles requires management to make certain estimates and assumptions. In addition to the estimates we make in connection with fair value measurements, and discretionary compensation accruals, the use of estimates and assumptions is also important in determining provisions for losses that may arise from the allowance for losses on loans and lending commitments held for investment, tax audits, litigation and regulatory proceedings. Significant judgment is required in making these estimates and our final liabilities may ultimately be materially different.

The Bank's compensation and benefits include discretionary compensation, which is finalized at year-end. We believe the most appropriate way to recognize an estimate of annual discretionary compensation among interim periods is based on an allocation of GS Group's discretionary compensation estimates for the same interim periods. The Bank's overall compensation expense in any given year is influenced by, among other factors, GS Group's overall financial performance, prevailing labor markets, business mix, the structure of GS Group's share-based compensation programs and the external environment. See "Results of Operations — Financial Overview — Operating Expenses" below for information about our compensation.

We estimate and record an allowance for credit losses related to our loans receivable and lending commitments held for investment. Management's estimate of loan losses entails judgment about loan collectability at the reporting dates, and there are uncertainties inherent in those judgments. See Note 9 to the condensed consolidated financial statements for further information about the allowance for losses on loans and lending commitments held for investment.

In accounting for income taxes, we recognize tax positions in the financial statements only when it is more likely than not that the position will be sustained on examination by the relevant taxing authority based on the technical merits of the position. See Note 20 to the condensed consolidated financial statements for further information about accounting for income taxes.

Our estimated liability in respect of litigation and regulatory proceedings is determined on a case-by-case basis and represents an estimate of probable losses after considering, among other factors whether such liabilities are covered by the Group Inc. Guarantee, the progress of each case or proceeding, our experience and the experience of others in similar cases or proceedings, and the opinions and views of legal counsel. See Note 18 to the condensed consolidated financial statements for further information about the Group Inc. Guarantee.

### Results of Operations

The composition of our net revenues can vary over time as financial markets and the scope of our operations change. The composition of net revenues can also vary over the shorter term due to fluctuations in economic and market conditions. In addition to transactions entered into with third parties, the Bank also enters into transactions with affiliates in the normal course of business, primarily as part of its market-making activities and general operations. See "Risk Factors" in Part I of the 2015 Annual Report for further information about the impact of economic and market conditions on our results of operations.

#### Financial Overview

The table below presents an overview of our financial results and selected financial ratios.

<i>\$ in millions</i>	Six Months Ended June	
	2016	2015
Net revenues	\$ 1,571	\$ 1,615
Pre-tax earnings	1,069	1,136
Net earnings	712	706
Annualized net earnings to average assets	0.9%	1.1%
Annualized return on average shareholder's equity <sup>1</sup>	6.1%	6.5%
Total average equity to average assets	15.3%	16.7%

1. Return on average shareholder's equity is computed by dividing annualized net earnings by average monthly shareholder's equity.

## Management's Discussion and Analysis

### Net Revenues

The table below presents our net revenues by line item on the condensed consolidated statements of earnings, as well as our net interest margin.

\$ millions (except net interest margin)	Six Months Ended June	
	2016	2015
Interest income	\$ 1,302	\$ 962
Interest expense	537	302
Net interest income	765	660
Non-interest revenues	806	955
<b>Net revenues, including net interest income</b>	<b>\$ 1,571</b>	<b>\$ 1,615</b>
Net interest margin (basis points)	110	114

In the table above:

- “Interest income” is primarily generated from the Bank’s lending portfolio, including corporate lending, private bank lending and other lending. Corporate lending interest income includes income from term loans, revolving lines of credit, letter of credit facilities and bridge loans (collectively, “bank loans”). Private bank lending interest income includes income from loans to private wealth management clients primarily on a secured basis and secured residential mortgages. Interest income is also earned from certain financial instruments owned, at fair value and securities purchased under agreements to resell. In addition, interest is earned on cash deposits held primarily at the Federal Reserve Bank of New York (FRBNY), and from collateral balances posted to counterparties.
- “Interest expense” includes the interest associated with deposit-taking activities, including accepting deposits directly from private wealth management clients, through deposit sweep agreements with third-party broker-dealers, through the issuance of term certificates of deposit and directly from retail customers through our online deposit platform that was acquired from GE Capital Bank. The Bank applies hedge accounting for certain interest rate swaps used to manage the interest rate exposure of certain fixed-rate term certificates of deposit. For qualifying fair value hedges, gains and losses on derivatives are included in interest expense. See Note 7 to the condensed consolidated financial statements for further information about hedge accounting.

Interest expense also includes interest from certain financial instruments sold, but not yet purchased, at fair value (including cash instruments), collateralized financings (including interest on advances from the FHLB), unsecured borrowings (including funding facilities primarily from affiliates) and collateral balances received from counterparties.

- “Non-interest revenues” include net gains and losses from financial instruments that are generated from market-making and risk management activities in interest rate, currency, credit, and other derivatives and related products which are primarily accounted for at fair value. In addition, non-interest revenues primarily include fees earned from relationships with affiliates, loan syndication fees, provisions for losses on loans and lending commitments and other fees.

### Six Months Ended June 2016 versus June 2015

Net revenues on the condensed consolidated statements of earnings were \$1.57 billion for the first half of 2016, a decrease of 3% compared with \$1.62 billion for the first half of 2015. The decrease in net revenues was primarily driven by higher provision for losses on loans and lending commitments and lower net gains from financial instruments, partially offset by higher net interest income.

**Net Interest Income.** Net interest income on the condensed consolidated statements of earnings was \$765 million for the first half of 2016, 16% higher than the first half of 2015. Net interest income was 49% of net revenues in the first half of 2016, compared with 41% in the first half of 2015. See below for further information about interest income and interest expense.

Interest income on the condensed consolidated statements of earnings was \$1.30 billion for the first half of 2016, 35% higher than the first half of 2015, primarily reflecting higher interest income due to growth in our lending portfolio and higher average cash deposits primarily held at the FRBNY. See “Supplemental Financial Information – Distribution of Assets, Liabilities and Shareholders’ Equity” for further information about our sources of interest income, including average balances and rates.

## Management's Discussion and Analysis

The table below presents our sources of interest income.

\$ in millions	Six Months Ended June	
	2016	2015
Financial instruments owned, at fair value	\$ 402	\$ 452
Loans receivable	540	391
Securities purchased under agreements to resell	65	30
Deposits with banks	159	60
Other	136	29
<b>Total interest income</b>	<b>\$ 1,302</b>	<b>\$ 962</b>

In the table above:

- Interest income from financial instruments owned, at fair value, includes interest income from our loans accounted for at fair value. See Note 8 to the condensed consolidated financial statements for further information about loans accounted for at fair value. Interest income from financial instruments owned, at fair value was \$402 million for the first half of 2016, 11% lower than the first half of 2015, primarily due to lower average holdings of agency mortgage-backed securities and U.S. government obligations.
- Interest income from loans receivable was \$540 million for the first half of 2016, 38% higher than the first half of 2015, primarily due to growth in lending to corporate and private wealth management clients. See Note 9 to the condensed consolidated financial statements for further information about loans receivable.
- Interest income from securities purchased under agreements to resell was \$65 million for the first half of 2016, significantly higher than the first half of 2015, primarily due to higher interest rates.
- Interest income from deposits with banks was \$159 million for the first half of 2016, significantly higher than the first half of 2015, primarily due to increases in cash deposits held at the FRBNY, where substantially all of the Bank's cash is held, related to the acquisition of GE Capital Bank's online deposit platform and increases in interest rates at the FRBNY. See Note 3 to the condensed consolidated financial statements for further information about our cash.
- Other interest income includes interest income from loans accounted for as held for sale and collateral balances posted to counterparties. Other interest income was \$136 million for the first half of 2016, significantly higher than the first half of 2015, primarily due to higher average loans accounted for as held for sale and collateral posted to counterparties.

Interest expense on the condensed consolidated statements of earnings was \$537 million for the first half of 2016, 78% higher than the first half of 2015, primarily reflecting higher interest expense on our interest-bearing deposits and other interest expense during the first half of 2016. See "Supplemental Financial Information – Distribution of Assets, Liabilities and Shareholders' Equity" for further information about our sources of interest expense, including average balances and rates.

The table below presents our sources of interest expense.

\$ in millions	Six Months Ended June	
	2016	2015
Deposits	\$ 358	\$ 166
Borrowings	35	29
Financial instruments sold, but not yet purchased, at fair value	20	16
Other	124	91
<b>Total interest expense</b>	<b>\$ 537</b>	<b>\$ 302</b>

In the table above:

- Interest expense from deposits was \$358 million for the first half of 2016, significantly higher than the first half of 2015, primarily from higher average deposit balances related to the acquisition of GE Capital Bank's online deposit platform and higher interest rates.
- Interest expense from borrowings was \$35 million for the first half of 2016, 21% higher than the first half of 2015, primarily from higher average FHLB advances.
- Interest expense from financial instruments sold, but not yet purchased, at fair value was \$20 million for the first half of 2016, 25% higher than the first half of 2015, primarily from higher average balances and interest rates.
- Other interest expense primarily includes interest expense on collateral balances received from counterparties and expense on funding facilities, primarily from affiliates. Other interest expense was \$124 million for the first half of 2016, 36% higher than the first half of 2015, primarily from higher average collateral received from counterparties.

**Non-Interest Revenues.** Non-interest revenues were \$806 million for the first half of 2016, 16% lower than the first half of 2015. The decrease was primarily due to higher provision for losses on loans and lending commitments and lower net gains from financial instruments, reflecting lower revenues from currencies and credit products.

## Management's Discussion and Analysis

**Net Interest Margin.** Net interest margin decreased by 4 basis points to 110 basis points for the first half of 2016, compared with 114 basis points for the first half of 2015, primarily driven by increased excess liquidity that had yet to be deployed.

### Operating Expenses

Our operating expenses are primarily influenced by levels of compensation, business activity and headcount. The principal component of our operating expenses is service charges, which represent the cost of services provided by affiliates to the Bank. Service charges include employment related costs of dual employees and employees of affiliates pursuant to SLAs. Compensation and benefits include salaries, discretionary compensation, amortization of equity awards and other items such as benefits. Compensation and benefits relate to direct Bank employees. Discretionary compensation is significantly impacted by, among other factors, GS Group's overall financial performance, prevailing labor markets, business mix, the structure of GS Group's share-based compensation programs and the external environment.

The table below presents our operating expenses and total staff.

<i>\$ in millions, except total staff</i>	Six Months Ended June	
	2016	2015
Compensation and benefits	\$ 112	\$ 99
Service charges	250	280
Other expenses	140	100
<b>Total operating expenses</b>	<b>\$ 502</b>	<b>\$ 479</b>
Total staff at period-end	691	393

In the table above:

- Compensation and benefits and Service charges include employee-related expenses. As described above, Compensation and benefits are expenses of direct Bank employees. Service charges includes expenses related to dual employees and employees of affiliates who provide services to the Bank pursuant to SLAs.
- Other expenses include brokerage, clearing and exchange fees, professional fees, regulatory and agency fees and occupancy expenses.

### Six Months Ended June 2016 versus June 2015

Operating expenses on the condensed consolidated statements of earnings were \$502 million for the first half of 2016, 5% higher than the first half of 2015. Compensation and benefits and Other expenses increased, offset by a decrease in service charges.

Compensation and benefits expenses on the condensed consolidated statements of earnings were \$112 million for the first half of 2016, 13% higher than the first half of 2015, reflecting an increase in total staff primarily related to new business initiatives.

Service charges on the condensed consolidated statements of earnings were \$250 million for the first half of 2016, 11% lower than the first half of 2015, primarily reflecting a decrease in services required under SLAs.

Other expenses on the condensed consolidated statements of earnings were \$140 million for the first half of 2016, 40% higher than the first half of 2015, reflecting an increase in professional fees primarily related to new business initiatives, regulatory and other fees.

### Provision for Taxes

The effective income tax rate for the first half of 2016 was 33.4%, up from the full year tax rate of 31.7% for 2015. The increase compared with full year 2015 was primarily due to the impact of settlements of tax audits in 2015, partially offset by the impact of changes in tax law in 2015.

## Balance Sheet and Funding Sources

### Balance Sheet Management

One of the risk management disciplines for a financial institution is its ability to manage the size and composition of its balance sheet. The Bank leverages the firmwide balance sheet management process. While the asset base of the Bank changes due to client activity, market fluctuations and business opportunities, the size and composition of our balance sheet also reflects factors including (i) our overall risk tolerance, (ii) the amount of equity capital we hold and (iii) our funding profile, among other factors. See "Equity Capital Management and Regulatory Capital — Equity Capital Management" for information about our equity capital management process.

In order to ensure appropriate risk management, we seek to maintain a sufficiently liquid balance sheet and, together with GS Group, have processes in place to dynamically manage assets, liabilities and liquidity which include (i) quarterly planning, (ii) business-specific limits for the businesses of GS Group, which include the activities of the Bank, (iii) monitoring of key metrics and (iv) scenario analyses.

## Management's Discussion and Analysis

**Quarterly Planning.** GS Group prepares a quarterly balance sheet plan that combines projected total assets and composition of assets with its expected funding sources for the upcoming quarter. Within this process, GS Group also considers which businesses operate within the Bank and the availability of Bank-specific funding sources.

The objectives of this quarterly planning process are:

- To develop near-term balance sheet projections, taking into account the general state of the financial markets and expected business activity levels, as well as regulatory requirements;
- To allow GS Group's business risk managers and managers from independent control and support functions to objectively evaluate balance sheet limit requests from business managers in the context of GS Group's overall balance sheet constraints, including the Bank's liability profile and equity capital levels, and key metrics; and
- To inform the target amount, tenor and type of funding to raise, based on projected assets and forecasted maturities.

As part of the firmwide process, the consolidated quarterly plan is reviewed and approved by the Firmwide Finance Committee, which includes Bank representatives, and is a sub-committee of the Firmwide Risk Committee of GS Group.

The review includes the following:

- Balance sheet plans by businesses of GS Group, including planned activities in the Bank;
- Funding projections; and
- Projected key metrics.

The Bank's limits are reviewed and approved by the Bank Finance Committee. See "Risk Management — Overview and Structure of Risk Management" for an overview of our risk management structure.

**Business-Specific Limits.** The Firmwide Finance Committee sets asset and liability limits for each of GS Group's businesses, which include activities of the Bank. These limits are set at levels which are close to actual operating levels, rather than at levels which reflect our maximum risk appetite, in order to ensure prompt escalation and discussion among business managers and managers in independent control and support functions on a routine basis. The Firmwide Finance Committee, as well as the Bank Finance Committee where applicable to the Bank, review and approve limits on a quarterly basis and may also approve changes in limits on an ad hoc basis in response to changing business needs or market conditions. Requests for changes in limits are evaluated after giving consideration to their impact on key metrics. Compliance with limits is monitored on a daily basis by business risk managers, as well as managers in independent control and support functions.

**Monitoring of Key Metrics.** Key balance sheet metrics are monitored daily as part of the GS Group process, both by businesses of GS Group, which include activities of the Bank, and on a consolidated basis including limit utilization and risk measures. This includes allocating assets to businesses and reviewing movements resulting from new business activity and market fluctuations.

**Scenario Analyses.** The Bank conducts scenario analyses as part of the Dodd-Frank Act Stress Tests (DFAST), our resolution planning, as well as for other regulatory and business planning purposes. See "Equity Capital Management and Regulatory Capital — Equity Capital Management" below for further information about these scenario analyses. These scenarios cover short-term and long-term time horizons using various macroeconomic and Bank-specific assumptions, based on a range of economic scenarios. We use these analyses to assist us in developing our longer-term balance sheet management strategy, including the level and composition of assets, funding and equity capital. Additionally, these analyses help us develop approaches for maintaining appropriate funding, liquidity and capital across a variety of situations, including a severely stressed environment.

## Management's Discussion and Analysis

### Balance Sheet Analysis and Metrics

As of June 2016, total assets on the condensed consolidated statements of financial condition were \$160.67 billion, an increase of \$26.17 billion from December 2015. This increase was driven by an increase in cash, primarily due to an increase in deposits balances from our clients and retail customers reflecting the acquisition of GE Capital Bank's online deposit platform. The increase was also driven by an increase in receivables from customers, counterparties, brokers, dealers and clearing organizations reflecting increases in collateral receivable, and loans receivable, reflecting growth in lending activity. These increases were partially offset by decreases in financial instruments owned, at fair value, primarily from a decrease in our lending portfolio accounted for at fair value.

As of June 2016, total liabilities on the condensed consolidated statements of financial condition were \$136.79 billion, an increase of \$25.47 billion from December 2015. This increase was primarily due to an increase in deposits reflecting the acquisition of GE Capital Bank's deposits, increases in private bank deposits and deposits from affiliates.

### Funding Sources

Our primary sources of funding are deposits, collateralized financings, and unsecured borrowings from affiliates. We seek to maintain broad and diversified funding sources across products, programs, and creditors to avoid funding concentrations.

We raise funding through a number of different sources, including:

- Savings and demand deposits, substantially all through deposit sweep programs with affiliated and third-party broker-dealers, online savings accounts and affiliates;
- Time deposits, substantially all of which are brokered certificates of deposit received through third party and affiliated brokers, and from online retail customers;
- Collateralized financings, such as repurchase agreements and FHLB advances; and
- Unsecured borrowings from affiliates.

All of our funding is raised in U.S. dollars. We generally distribute our funding products through third party distributions and private wealth advisors, to a creditor base in a variety of markets and with respect to our online deposit platform, directly to retail customers. We believe that our relationships with our creditors are critical to our liquidity. Our creditors include individuals, financial institutions, non-financial institutions, corporations and asset managers. We have imposed various internal guidelines to monitor creditor concentration across our funding programs.

**Deposits.** As of June 2016 and December 2015, the Bank's deposits were \$113.92 billion and \$88.28 billion, respectively. See Note 13 to the condensed consolidated financial statements for further information about our deposits.

The average annualized interest rate on the Bank's total deposits was 0.70% and 0.41% for the first half of 2016 and 2015, respectively. The table below presents the average annualized interest rate on each type of deposit.

	Six Months Ended June	
	2016	2015
Savings and demand	0.43%	0.19%
Time	0.99%	0.66%

See "Supplemental Financial Information — Distributions of Assets, Liabilities, and Shareholder's Equity" and Note 13 to our condensed consolidated financial statements for further information about deposits.

**Collateralized Financings.** The Bank funds certain of its inventory on a secured basis by entering into collateralized financing agreements, such as bilateral repurchase agreements. The Bank is a member of the FHLB. Outstanding borrowings from the FHLB were \$2.42 billion and \$2.92 billion as of June 2016 and December 2015, respectively. See Note 10 to our condensed consolidated financial statements for further information about collateralized financings.



## Management's Discussion and Analysis

We also have access to funding through the Federal Reserve Bank discount window. While we do not rely on this funding in our liquidity planning and stress testing, we maintain policies and procedures necessary to access this funding and we periodically test the discount window borrowing procedures. The table below presents the Bank's collateralized financings on the condensed consolidated statements of financial condition.

\$ in millions	As of	
	June 2016	December 2015
Securities sold under agreements		
to repurchase, at fair value	\$ 3,319	\$ 3,425
Secured long-term borrowings	1,920	2,524
Secured short-term borrowings	650	502
<b>Total</b>	<b>\$ 5,889</b>	<b>\$ 6,451</b>

**Unsecured Borrowings.** The Bank raises funding through unsecured borrowings primarily from Group Inc. Group Inc. raises non-deposit unsecured funding and lends to its consolidated subsidiaries, including the Bank, to meet their excess funding needs. This approach enhances the flexibility with which Group Inc. can meet the funding requirements of the Bank and other subsidiaries. See Note 14 to the condensed consolidated financial statements for further information about our unsecured borrowings.

The table below presents the Bank's unsecured borrowings, substantially all of which are with Group Inc. and other affiliates.

\$ in millions	As of	
	June 2016	December 2015
Unsecured long-term borrowings <sup>1</sup>	\$ 2,135	\$ 2,059
Unsecured short-term borrowings	110	100
<b>Total</b>	<b>\$ 2,245</b>	<b>\$ 2,159</b>

1. Includes a \$5.00 billion revolving subordinated loan agreement with Group Inc. Outstanding subordinated borrowings under this agreement were \$2.00 billion as of both June 2016 and December 2015. See Note 14 to the condensed consolidated financial statements for further information about our subordinated borrowings.

## Equity Capital Management and Regulatory Capital

Capital adequacy is of critical importance to us. We have in place a comprehensive capital management policy that provides a framework, defines objectives and establishes guidelines to assist us in maintaining the appropriate level and composition of capital in both business-as-usual and stressed conditions.

### Equity Capital Management

We determine the appropriate level and composition of our equity capital by considering multiple factors including our current and future regulatory capital requirements, the results of our capital planning and stress testing process and other factors such as rating agency guidelines, the business environment and conditions in the financial markets. The Bank has established a comprehensive governance structure to manage and oversee its day-to-day capital management activities and to ensure compliance with the corresponding policies. Capital management activity is overseen by the Bank's Board of Directors (the Bank Board). In addition, the Bank Risk Committee oversees this activity with regular monitoring of capital management activity provided by the Bank Finance Committee. Levels of our capital usage are controlled principally by setting limits on Bank unsecured funding utilization and/or limits on risk at both the Bank and business levels.

### Restrictions on Payments

Net assets of the Bank are restricted as to the payment of dividends to Group Inc. In addition to limitations on the payment of dividends imposed by federal and state laws, the Federal Reserve Board and the FDIC have authority to prohibit or limit the payment of dividends by the banking organizations they supervise if, in their opinion, payment of a dividend would constitute an unsafe or unsound practice in light of the financial condition of the banking organization. During the six months ended June 2016 and the year ended December 2015, the Bank did not pay any dividends. Under these regulatory rules, as of June 2016 and December 2015, the Bank could have declared dividends up to \$3.71 billion and \$2.39 billion, respectively, to Group Inc.

**Capital Planning and Stress Testing Process.** As part of capital planning, we project sources and uses of capital given a range of business environments, including stressed conditions. Our stress testing process is designed to identify and measure material risks associated with our business activities including market risk, credit risk and operational risk, as well as our ability to generate revenues.

## Management's Discussion and Analysis

The following is a description of our capital planning and stress testing process:

- **Capital Planning.** Our capital planning process incorporates an internal capital adequacy assessment with the objective of ensuring that the Bank is appropriately capitalized relative to the risks in our business. We incorporate stress scenarios into our capital planning process with a goal of holding sufficient capital to ensure we remain adequately capitalized after experiencing a severe stress event. Our assessment of capital adequacy is viewed in tandem with our assessment of liquidity adequacy and is integrated into our overall risk management structure, governance and policy framework.

Our capital planning process also includes an internal risk-based capital assessment. This assessment incorporates market risk, credit risk and operational risk. Market risk is calculated by using Value-at-Risk (VaR) calculations supplemented by risk-based add-ons which include risks related to rare events (tail risks). Credit risk utilizes assumptions about our counterparties' probability of default and the size of our losses in the event of a default. Operational risk is calculated based on scenarios incorporating multiple types of operational failures as well as considering internal and external actual loss experience. Backtesting for market risk and credit risk is used to gauge the effectiveness of models at capturing and measuring relevant risks.

- **Stress Testing.** Our stress tests incorporate our internally designed stress scenarios, including our internally developed severely adverse scenario and those required under DFAST, and are designed to capture our specific vulnerabilities and risks. The rules adopted by the Federal Reserve Board under the Dodd-Frank Act require the Bank to conduct stress tests on an annual basis and publish a summary of certain results. The Bank submitted its 2016 annual DFAST stress results to the Federal Reserve Board in April 2016 and published a summary of its results in June 2016.

**Contingency Capital Plan.** As part of our comprehensive capital management policy, we maintain a contingency capital plan. Our contingency capital plan provides a framework for analyzing and responding to a perceived or actual capital deficiency, including, but not limited to, identification of drivers of a capital deficiency, as well as mitigants and potential actions. It outlines the appropriate communication procedures to follow during a crisis period, including internal dissemination of information as well as timely communication with external stakeholders.

### Resolution Plan

The Bank is required by the FDIC to submit a periodic plan that describes our strategy for a rapid and orderly resolution in the event of material financial distress or failure (resolution plan). The Bank submitted its 2015 resolution plan to its regulators on September 1, 2015. The Bank has not yet received supervisory feedback on its 2015 resolution plan. In July 2016, the Bank received notification from the FDIC that its resolution plan submission date was extended to October 1, 2017 and the 2016 resolution plan requirement will be satisfied by the submission of the 2017 resolution plan.

GS Group is required by the Federal Reserve Board and the FDIC to submit a periodic resolution plan and the Bank is considered a material entity in the GS Group plan. See "Business — Regulation" in Part I of the 2015 Annual Report for further information about the resolution plan of the Bank.

In April 2016, the Federal Reserve Board and the FDIC provided feedback on the 2015 resolution plans of eight systemically important domestic banking institutions and provided guidance related to the 2017 resolution plan submissions. Group Inc.'s plan was not jointly found to be non-credible or to not facilitate an orderly resolution under the U.S. bankruptcy code. While the FDIC identified deficiencies and noted that it found that Group Inc.'s plan was not credible or would not facilitate an orderly resolution under the U.S. bankruptcy code, the Federal Reserve Board did not identify any such deficiencies. In response to the feedback received, Group Inc. must (i) submit by October 1, 2016 a status report on its actions to address joint shortcomings identified by the agencies and a separate public section that explains, at a high level, the actions Group Inc. plans to take to address the joint shortcomings and (ii) submit Group Inc.'s resolution plan, due on July 1, 2017, addressing the joint shortcomings and taking into account the additional guidance.

### Rating Agency Guidelines

The credit rating agencies assign the Bank long- and short-term issuer ratings, as well as ratings on our long-term and short-term bank deposits. They also assign credit ratings to the obligations of Group Inc., which guarantees substantially all of the Bank's senior unsecured obligations and deposits, excluding most CDs, outstanding as of June 2016.

## Management's Discussion and Analysis

The level and composition of our equity capital are among the many factors considered in determining our credit ratings. Each agency has its own definition of eligible capital and methodology for evaluating capital adequacy, and assessments are generally based on a combination of factors rather than a single calculation. See "Risk Management — Liquidity Risk Management — Credit Ratings" for further information about our credit ratings.

### Consolidated Regulatory Capital

The Bank is subject to regulatory capital requirements and calculates its capital ratios in accordance with the risk-based capital and leverage requirements applicable to state member banks, which are based on the Federal Reserve Board's revised risk-based capital and leverage regulations, subject to certain transitional provisions (Revised Capital Framework). These regulations are largely based on the Basel Committee on Banking Supervision's (Basel Committee) final capital framework for strengthening international capital standards (Basel III) and also implement certain provisions of the Dodd-Frank Act. Under the Revised Capital Framework, we are an "Advanced approach" banking organization.

We calculate our Common Equity Tier 1 (CET1), Tier 1 capital and Total capital ratios in accordance with (i) the Standardized approach and market risk rules set out in the Revised Capital Framework (together, the Standardized Capital Rules) and (ii) the Advanced approach and market risk rules set out in the Revised Capital Framework (together, the Basel III Advanced Rules) as described in Note 17 to the condensed consolidated financial statements. The lower of each ratio calculated in (i) and (ii) is the ratio against which our compliance with minimum ratio requirements is assessed. Each of the ratios calculated in accordance with the Standardized Capital Rules was lower than those calculated in accordance with the Basel III Advanced Rules and therefore the Standardized Capital ratios were the ratios that applied to us as of June 2016 and December 2015.

See Note 17 to the condensed consolidated financial statements for further information about our capital ratios as of June 2016 and December 2015, and for additional information about the Revised Capital Framework.

### Minimum Capital Ratios and Capital Buffers

The U.S. Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), among other things, requires the federal banking agencies to take "prompt corrective action" (PCA) in respect of depository institutions that do not meet specified capital requirements. FDICIA establishes five capital categories for FDIC-insured banks: well-capitalized, adequately capitalized, undercapitalized, significantly undercapitalized and critically undercapitalized.

Under the regulatory framework for prompt corrective action applicable to the Bank, in order to meet the quantitative requirements for being a "well-capitalized" depository institution, the Bank must meet higher minimum requirements than the minimum ratios in the table below.

The table below presents the minimum required ratios and "well-capitalized" minimum ratios in accordance with the Revised Capital Framework as of June 2016, as well as the estimated minimum ratios that the Bank expects will apply at the end of the transitional period beginning January 2019.

	June 2016 Minimum Ratio	January 2019 Estimated Minimum Ratio	"Well-capitalized" Minimum Ratio
CET1 ratio	5.125%	7.0%	6.5%
Tier 1 capital ratio	6.625%	8.5%	8.0%
Total capital ratio	8.625%	10.5%	10.0%
Tier 1 leverage ratio	4.000%	4.0%	5.0%

In the table above:

- The minimum ratios as of June 2016 reflect (i) the 25% phase-in of the capital conservation buffer (0.625%) and (ii) the counter-cyclical capital buffer of zero percent.
- The estimated minimum ratios as of January 2019 reflect (i) the fully phased-in capital conservation buffer (2.5%) and (ii) the counter-cyclical capital buffer of zero percent.
- Tier 1 leverage ratio is defined as Tier 1 capital divided by quarterly average adjusted total assets (which includes adjustments for goodwill and identifiable intangible assets).
- "Well-capitalized" minimum ratios were applicable for 2015 and forward.

See Note 17 to the condensed consolidated financial statements for further information about the capital conservation buffer and the counter-cyclical capital buffer.

## Management's Discussion and Analysis

Our regulators could change these buffers in the future specifically as it relates to the counter-cyclical capital buffer as certain aspects are still being finalized by the Federal Reserve Board. As a result, the minimum ratios we are subject to as of January 1, 2019 could be higher than the amounts presented in the table above.

### Fully Phased-in Capital Ratios

The fully-phased-in CET1, Tier 1 Capital and Total Capital ratios under both the Standardized Capital Rules and the Basel III Advanced Rules are substantially the same as our transitional CET1, Tier 1 Capital and Total Capital ratios under the Standardized Capital Rules and Basel III Advanced Rules, respectively. See Note 17 to the condensed consolidated financial statements for information about our transitional capital ratios.

### Supplementary Leverage Ratio

The Revised Capital Framework includes a supplementary leverage ratio requirement for Advanced approach banking organizations. Under amendments to the Revised Capital Framework, the U.S. federal bank regulatory agencies approved a final rule that implements the supplementary leverage ratio aligned with the definition of leverage established by the Basel Committee. The supplementary leverage ratio compares Tier 1 capital to a measure of leverage exposure, defined as total daily average assets for the quarter less certain deductions plus certain off-balance-sheet exposures, including a measure of derivatives exposures and commitments. Under Federal Reserve Board rules, commencing on January 1, 2018, in order to be considered a "well-capitalized" depository institution, the Bank must have a supplementary leverage ratio of 6.0% or greater.

As of June 2016 and December 2015, our supplementary leverage ratio was 7.3% and 7.1%, respectively, based on Tier 1 capital on a fully phased-in basis of \$23.72 billion, and \$23.02 billion, respectively, divided by total leverage exposure of \$327 billion (total daily average assets for the quarter of \$161 billion plus adjustments of \$166 billion) and \$324 billion (total daily average assets for the quarter of \$134 billion plus adjustments of \$190 billion), respectively. This supplementary leverage ratio is based on our current interpretation and understanding of the U.S. federal bank regulatory agencies' final rule and may evolve as we discuss its interpretation and application with our regulators.

## Regulatory and Other Developments

### Regulatory Developments

Our businesses are subject to significant and evolving regulation. The Dodd-Frank Act, enacted in July 2010, significantly altered the financial regulatory regime within which we operate. In addition, other reforms have been adopted or are being considered by regulators and policy makers. We expect that the principal areas of impact from regulatory reform for us will be increased regulatory capital requirements and increased regulation and restriction on certain activities, including our derivative activities. However, given that many of the new and proposed rules are highly complex, the full impact of regulatory reform will not be known until the rules are implemented and market practices develop under the final regulations.

There is increased regulation of, and restrictions on, our activities, including OTC derivatives markets and transactions, particularly related to swaps and security-based swaps. Importantly, the banking regulators adopted rules for margining of certain OTC derivatives that are not centrally cleared, which are applicable to the Bank as a registered swap dealer. Under these rules, the Bank will be required to collect and post both initial and variation margin from and to certain unaffiliated counterparties but will only be required to collect initial margin, although it must still exchange variation margin, with affiliated counterparties.

In January 2016, the Basel Committee finalized a revised framework for calculating minimum capital requirements for market risk. The revisions constitute a fundamental change to the calculation of both model-based and non-model-based components of market risk capital. The Basel Committee has set an effective date for first reporting under the revised framework of December 31, 2019. The U.S. federal bank regulatory agencies have not yet proposed rules implementing these revisions for U.S. banking organizations. We are currently evaluating the potential impact of the Basel Committee's revised framework.

The Basel Committee continues to consult on several potential changes to regulatory capital requirements that could impact our capital ratios in the future. In particular, the Basel Committee has issued consultation papers on, among other matters, revisions to the operational risk capital framework and several changes to the calculation of credit RWAs under both model-based and standardized approaches.

## Management's Discussion and Analysis

In May 2016, the Federal Reserve Board released a proposal that would impose restrictions on qualified financial contracts (QFCs) of a Global Systemically Important Bank (G-SIB), such as Group Inc., and generally of its subsidiaries. This proposal is intended to facilitate the orderly resolution of a failed G-SIB by limiting the ability of the G-SIB to transact with QFC counterparties unless such counterparties waive rights to terminate such contracts immediately upon the entry of the G-SIB or one of its affiliates into resolution. The effective date is approximately one year after the proposal is finalized.

See "Business — Regulation" in Part I of the 2015 Annual Report for further information about the supervision and regulation of the Bank.

### Other Developments

In June 2016, a referendum was passed for the United Kingdom to exit the European Union (Brexit). The exit of the United Kingdom from the European Union will likely change the arrangements by which U.K. firms are able to provide services in the European Union, which may adversely affect the manner in which GS Group operates certain of its businesses in the European Union and could require GS Group to restructure certain of its operations. The timing and the outcome of the negotiations between the United Kingdom and the European Union in connection with Brexit are both highly uncertain. Such uncertainty has resulted in, and may continue to result in, market volatility and negatively impact the confidence of investors and clients.

## Off-Balance-Sheet Arrangements and Contractual Obligations

### Off-Balance-Sheet Arrangements

We have various types of off-balance-sheet arrangements that we enter into in the ordinary course of business. Our involvement in these arrangements can take many different forms, including:

- Holding interest in special purpose entities such as mortgage-backed and other asset-backed securitization vehicles;
- Providing guarantees, indemnifications, commitments, and representations and warranties; and
- Entering into interest rate, foreign currency, equity, commodity and credit derivatives, including total return swaps.

We enter into these arrangements primarily in connection with our market-making and lending activities.

Our financial interests in, and derivative transactions with, nonconsolidated entities are generally accounted for at fair value, in the same manner as our other financial instruments.

The table below presents where information about our various off-balance-sheet arrangements may be found in this Semi-Annual Report. In addition, see Note 3 to the condensed consolidated financial statements for information about our consolidation policies.

Type of Off-Balance-Sheet Arrangement	Disclosure in this Semi-Annual Report
Variable interests and other obligations, including contingent obligations, arising from variable interests in nonconsolidated VIEs	See Note 11 to the condensed consolidated financial statements.
Lending and other commitments	See "Contractual Obligations" below and Note 16 to the condensed consolidated financial statements.
Guarantees	See "Contractual Obligations" below and Note 16 to the condensed consolidated financial statements.
Derivatives	See "Credit Risk Management — Credit Exposures — OTC Derivatives" below and Notes 4, 5, 7 and 16 to the condensed consolidated financial statements.

### Contractual Obligations

We have certain contractual obligations which require us to make future cash payments. These contractual obligations include our unsecured long-term borrowings, secured long-term financings, time deposits and contractual interest payments, all of which are included in our condensed consolidated statements of financial condition.

Our obligations to make future cash payments also include certain off-balance-sheet contractual obligations such as commitments, indemnifications and guarantees.

## Management's Discussion and Analysis

The table below presents our contractual obligations, commitments and guarantees by type.

<i>\$ in millions</i>	As of	
	June 2016	December 2015
<b>Amounts related to on-balance-sheet obligations</b>		
Time deposits	\$ 31,611	\$ 25,690
Secured long-term financings	1,920	2,524
Unsecured long-term borrowings	2,135	2,059
Contractual interest payments	2,852	2,796
<b>Amounts related to off-balance-sheet arrangements</b>		
Commitments to extend credit	88,956	96,477
Contingent and forward starting resale agreements	769	709
Forward starting repurchase and secured lending agreements	239	298
Investment commitments	638	708
Other commitments	404	307
Derivative guarantees	233,941	96,446
Securities lending indemnifications	33,224	37,256
Other financial guarantees	1,571	2,419

The table below presents our contractual obligations, commitments and guarantees by period of expiration.

<i>\$ in millions</i>	Contractual Obligations, Commitments and Guarantees Amount by Period of Expiration as of June 2016			
	Remainder of	2017 -	2019 -	2021 -
	2016	2018	2020	Thereafter
<b>Amounts related to on-balance-sheet obligations</b>				
Time deposits	\$ -	\$ 10,210	\$ 9,774	\$ 11,627
Secured long-term financings	-	1,425	495	-
Unsecured long-term borrowings	-	-	135	2,000
Contractual interest payments	318	1,174	703	657
<b>Amounts related to off-balance-sheet arrangements</b>				
Commitments to extend credit	6,823	20,098	39,738	22,297
Contingent and forward starting resale agreements	767	2	-	-
Forward starting repurchase and secured lending agreements	239	-	-	-
Investment commitments	6	3	-	629
Other commitments	404	-	-	-
Derivative guarantees	155,377	45,756	24,507	8,301
Securities lending indemnifications	33,224	-	-	-
Other financial guarantees	31	663	630	247

In the table above:

- Obligations maturing within one year of our financial statement date or redeemable within one year of our financial statement date at the option of the holders are excluded as they are treated as short-term obligations.
- Obligations that are repayable prior to maturity at our option are reflected at their contractual maturity dates and obligations that are redeemable prior to maturity at the option of the holders are reflected at the earliest dates such options become exercisable.
- Amounts included in the table do not necessarily reflect the actual future cash flow requirements for these arrangements because commitments and guarantees represent notional amounts and may expire unused or be reduced or cancelled at the counterparty's request.
- Due to the uncertainty of the timing and amounts that will ultimately be paid, our liability for unrecognized tax benefits has been excluded. See Note 20 to the condensed consolidated financial statements for further information about our unrecognized tax benefits.
- Contractual interest payments represents estimated future interest payments related to unsecured long-term borrowings, secured long-term financings and time deposits based on applicable interest rates as of June 2016.

See Notes 14 and 16 to the condensed consolidated financial statements for further information about our borrowings and our commitments, contingencies and guarantees, respectively.

## Management's Discussion and Analysis

### Risk Management

Risks are inherent in our business and include liquidity, market, credit, operational, model, legal, regulatory and reputational risks. For further information about our risk management processes, see “— Overview and Structure of Risk Management” below. Our risks include the risks across our risk categories, regions or global businesses, as well as those which have uncertain outcomes and have the potential to materially impact our financial results, our liquidity and our reputation. For further information about our areas of risk, see “— Liquidity Risk Management,” “— Market Risk Management,” “— Credit Risk Management,” “— Operational Risk Management” and “— Model Risk Management” below, and “Risk Factors” in Part I of the 2015 Annual Report.

Certain risk management processes as described in the “— Liquidity Risk Management,” “— Market Risk Management,” “— Credit Risk Management,” “— Operational Risk Management” and “— Model Risk Management” sections below are performed by GS Group at the level of its businesses, products, and revenue producing units which encompass all activities of the Bank. These processes are subject to Bank oversight, either pursuant to an SLA, or inclusive of Bank activities. All references in the sections below to businesses, products, and revenue producing units refer to those of GS Group.

### Overview and Structure of Risk Management

#### Overview

We believe that effective risk management is of primary importance to the success of the Bank. Accordingly, we have comprehensive risk management processes through which we monitor, evaluate and manage the risks we assume in conducting our activities. These include liquidity, market, credit, operational, model, legal, regulatory and reputational risk exposures. Our risk management framework, consistent with GS Group, is built around three core components: governance, processes and people.

**Governance.** Risk management governance starts with the Bank's Board which plays an important role in reviewing and approving risk management policies and practices. The Bank Board also receives regular briefings on our risks, including market risk, liquidity risk, credit risk, operational risk and model risk from our independent control and support functions, including the Bank's chief risk officer and chief financial officer, and on matters impacting our reputation from the Bank's general counsel, a member of both the Bank's and GS Group's Client and Business Standards Committees. The Bank's chief risk officer, as part of the review of our risk portfolio, regularly advises the Bank Board of relevant risk metrics and material exposures.

Next, at the most senior levels of the Bank, our leaders are experienced risk managers, with a sophisticated and detailed understanding of the risks we take. Our senior management, and senior managers within revenue-producing units and independent control and support functions, lead and participate in risk-oriented committees, including the Bank Risk Committee. Independent control and support functions include Compliance, Controllers, Credit Risk Management and Advisory (Credit Risk Management), Legal, Market Risk Management and Analysis (Market Risk Management), Operations, Model Risk Management, Operational Risk Management and Analysis (Operational Risk Management), Tax, Technology, and Bank Finance working in conjunction with GS Group Treasury. Liquidity Risk Management and Analysis (Liquidity Risk Management) supports the Bank's activities through its role as an independent control and support function of GS Group.

Our governance structure provides the protocol and responsibility for decision-making on risk management issues and ensures implementation of those decisions. We make extensive use of our risk-related committees that meet regularly and serve as an important means to facilitate and foster ongoing discussions to identify, manage and mitigate risks.

## Management's Discussion and Analysis

We maintain strong communication about risk and we have a culture of collaboration in decision-making among the revenue-producing units, independent control and support functions, committees and senior management. While we believe that the first line of defense in managing risk rests with the managers in the revenue-producing units, we dedicate extensive resources to independent control and support functions in order to ensure a strong oversight structure and an appropriate segregation of duties. We regularly reinforce our strong culture of escalation and accountability across GS Group divisions and functions, including the Bank.

**Processes.** We maintain various processes and procedures that are critical components of our risk management. We apply a rigorous framework of limits to control risk across transactions, products, businesses and markets. Bank-wide limits are set by the Bank Board with certain levels set by the Bank Risk Committee and monitored on a daily basis. Certain limits, other than regulatory and Bank Board-level limits, may be set at levels that will require periodic adjustments, rather than at levels which reflect our maximum risk appetite. This fosters an ongoing dialogue on risk among revenue-producing units, independent control and support functions, committees, senior management, and the Bank Board, as well as rapid escalation of risk-related matters. See "Liquidity Risk Management," "Market Risk Management" and "Credit Risk Management" for further information about our risk limits.

Active management of our positions is another important process. Proactive mitigation of our market and credit exposures minimizes the risk that we will be required to take outsized actions during periods of stress.

We also focus on the rigor and effectiveness of our risk systems. The goal of our risk management technology is to get the right information to the right people at the right time, which requires systems that are comprehensive, reliable and timely. We devote significant time and resources to our risk management technology to ensure that it consistently provides us with complete, accurate and timely information.

**People.** Even the best technology serves only as a tool for helping to make informed decisions in real time about the risks we are taking. Ultimately, effective risk management requires our people to interpret our risk data on an ongoing and timely basis and adjust risk positions accordingly. In both the revenue-producing units, and independent control and support functions, the experience of our professionals, and their understanding of the nuances and limitations of each risk measure, guide us in assessing exposures and maintaining them within prudent levels.

We reinforce a culture of effective risk management through firmwide training and development programs, inclusive of Bank, as well as the way we evaluate performance, and recognize and reward our people. The training and development programs, including certain sessions led by GS Group's most senior leaders, are focused on the importance of risk management, client relationships and reputational excellence. As part of the firmwide annual performance review process, we assess reputational excellence including how an employee exercises good risk management and reputational judgment, and adheres to the code of conduct and compliance policies. The Bank is included in GS Group's review and reward processes which are designed to communicate and reinforce to our professionals the link between behavior and how people are recognized, the need to focus on our clients and our reputation, and the need to always act in accordance with the highest standards.

### Structure

Ultimate oversight of risk is the responsibility of the Bank Board. The Bank Board oversees risk both directly and through its Audit Committee. Bank Management has established committees for risk oversight and committee membership consists of senior managers from both revenue-producing units and independent control and support functions. We have established procedures for these committees to ensure that appropriate information barriers are in place. Our primary risk committees are described below. All chairs of Bank management-level committees are employees or dual employees of the Bank.

The Bank leverages firmwide and divisional committees, where appropriate, for advice on certain Bank activities. Members of such committees understand their responsibility to review any proposed products, transactions or activities of the Bank and to act in the interest of the Bank. In addition, both Bank committees and firmwide committees have responsibility for considering the impact of transactions and activities on the Bank's reputation.



## Management's Discussion and Analysis

Membership of our risk committees is reviewed regularly and updated to reflect changes in the responsibilities of the committee members. Accordingly, the length of time that members serve on the respective committees varies as determined by the committee chairs and based on the responsibilities of the members within the Bank.

The Bank's independent control and support functions are responsible for day-to-day oversight or monitoring of risk, as described in greater detail in the following sections. The Bank's Internal Audit is accountable to the Audit Committee of the Bank Board. Internal Audit, which includes professionals with a broad range of audit and industry experience, including risk management expertise, is responsible for independently assessing and validating key controls within the Bank's risk management framework.

Our risk management governance structure includes the Bank Board, which has ultimate risk management oversight for the Bank, our key risk-related committees, which are described in further detail below, and the independence of our key control and support functions. The Bank operates as a subsidiary of GS Group and, when applicable, the Bank utilizes the structure and expertise of GS Group's firmwide, divisional and regional committees. In addition to its own Bank Committees, the Bank benefits from firmwide, regional and divisional committees for risk management, including the Firmwide Client and Business Standards Committee, Firmwide Risk Committee, GS Group Risk Governance Committee (through delegated authority from the Firmwide Risk Committee) and Firmwide Capital Committee, and related sub-committees.

### Committee Structure

The Bank's committee structure is described as follows:

**Bank Management Committee.** The Bank Management Committee oversees our activities, including our risk control functions. It provides this oversight directly and through authority delegated to committees it has established. This committee is comprised of our most senior leaders, and is chaired by our chief executive officer.

The Bank Management Committee also serves as the Bank's Client and Business Standards Committee (Bank's CBSC). In its capacity as the Bank's CBSC, the Bank Management Committee also addresses client concerns and incidents, reviews Bank operational and reputational risks, including conflicts, and reviews business practices. The Bank's CBSC may escalate issues to the GS Group Client and Business Standards Committee as necessary.

The following are the committees that are principally involved in Bank's risk management:

**Bank New Activity Committee.** The Bank New Activity Committee (BNAC) is responsible for the review and approval of new activities proposed to be conducted in the Bank. BNAC will also review, at its discretion, previously approved activities that are significant and that have changed in complexity and/or structure or present different reputational and suitability concerns over time to consider whether these activities remain appropriate. The review process may utilize the expertise of the Firmwide New Activity Committee and the Regional New Activity Committees.

**Bank Risk Committee.** The Bank Risk Committee is responsible for the ongoing monitoring and management of our market risk, credit risk, model risk, legal risk, operational risk and compliance with minimum regulatory capital ratios; internal capital adequacy assessment process; and Dodd-Frank Act stress testing procedures. The risk management methodologies of the Bank Risk Committee and its sub-committees are consistent with those of the Firmwide Risk Committee, as appropriate. The following are the primary committees that report to the Bank Risk Committee:

- **Bank Capital Committee.** The Bank Capital Committee approves extensions of credit that are intended to be held until repayment and are made for the purpose of achieving certain total economic returns on an individual or portfolio basis (transactions); reviews and approves proposed transactions of the Bank, determines risk tolerance, diversification or other metrics for such transactions; and provides oversight of any such transactions or portfolio of transactions. The Bank Capital Committee provides approval and oversight of debt-related transactions, including principal commitments of our capital. The Committee also serves as the Bank's Community Investment Committee (CIC). In its capacity as the Bank's CIC, the Bank Capital Committee reviews and approves proposed transactions of the Bank and GS Group in conjunction with fulfilling the Bank's obligations under the Community Reinvestment Act and proposed transactions by the Goldman Sachs Social Impact Fund, L.P., for which the Bank acts as investment manager.

## Management's Discussion and Analysis

- **Bank Finance Committee.** The Bank Finance Committee is responsible for the ongoing monitoring and review of the Bank's liquidity and funding risk, and investment portfolio risk; compliance with the minimum regulatory capital ratios; and internal capital adequacy assessment process.

### Liquidity Risk Management

#### Overview

Liquidity risk is the risk that we will be unable to fund the Bank or meet our liquidity needs in the event of Bank-specific, firmwide, broader industry, or market liquidity stress events. Liquidity is of critical importance to us, as most of the failures of financial institutions have occurred in large part due to insufficient liquidity. Accordingly, we have in place a comprehensive and conservative set of liquidity and funding policies. Our principal objective is to be able to fund the Bank and to enable our core businesses to continue to serve clients and generate revenues, even under adverse circumstances.

Bank Finance, working in conjunction with GS Group Treasury, has the primary responsibility for assessing, monitoring and managing our liquidity and funding strategy. Bank Finance is independent of the revenue-producing units and reports to the Bank's chief financial officer.

Liquidity Risk Management is an independent risk management function responsible for control and oversight of GS Group's liquidity risk management framework, inclusive of the Bank's liquidity risk management framework, including stress testing and limit governance. Liquidity Risk Management is independent of the revenue-producing units, Bank Finance and GS Group Treasury, and reports to GS Group's chief risk officer.

#### Liquidity Risk Management Principles

We manage liquidity risk according to three principles: (i) hold sufficient excess liquidity in the form of Global Core Liquid Assets (GCLA) to cover outflows during a stressed period, (ii) maintain appropriate Asset-Liability Management and (iii) maintain a viable Contingency Funding Plan.

**Global Core Liquid Assets.** GCLA is liquidity that we maintain to meet a broad range of potential cash outflows and collateral needs in a stressed environment. Our most important liquidity policy is to pre-fund our estimated potential cash and collateral needs during a liquidity crisis and hold this liquidity in the form of unencumbered, highly liquid securities and cash. We believe that the securities held in our GCLA would be readily convertible to cash in a matter of days, through liquidation, by entering into repurchase agreements or from maturities of resale agreements, and that this cash would allow us to meet immediate obligations without needing to sell other assets or depend on additional funding from credit-sensitive markets. Our GCLA reflects the following principles:

- The first days or weeks of a liquidity crisis are the most critical to a company's survival;
- Focus must be maintained on all potential cash and collateral outflows, not just disruptions to financing flows. Liquidity needs are determined by many factors, including market movements, collateral requirements and client commitments, all of which can change dramatically in a difficult funding environment;
- During a liquidity crisis, credit-sensitive funding, including unsecured borrowings, certain deposits and some types of secured financing agreements, may be unavailable, the terms (e.g., interest rates, collateral provisions and tenor) or availability of other types of secured financing may change and certain deposits may be withdrawn; and
- As a result of our policy to pre-fund liquidity that we estimate may be needed in a crisis, we hold more cash and unencumbered securities and have larger deposit and borrowings balances than we would otherwise require. We believe that our liquidity is stronger with greater balances of cash and highly liquid unencumbered securities even though it increases our total assets and our funding costs.

We believe that our GCLA provides us with a resilient source of funds that would be available in advance of potential cash and collateral outflows and gives us significant flexibility in managing through a difficult funding environment.

## Management's Discussion and Analysis

### Asset-Liability Management

Our liquidity risk management policies are designed to ensure we have a sufficient amount of financing, even when funding markets experience persistent stress. We seek to maintain a long-dated and diversified funding profile taking into consideration the characteristics and liquidity profile of our assets and modeled tenor of deposits with no stated maturity.

Our approach to asset-liability management includes:

- Conservatively managing the overall characteristics of our funding book, with a focus on maintaining long-term, diversified sources of funding in excess of our current requirements. See “Balance Sheet and Funding Sources — Funding Sources” for additional details;
- Actively managing and monitoring our asset base, with particular focus on the liquidity holding period and our ability to fund assets on a secured basis. We assess our funding requirements and our ability to liquidate assets in a stressed environment while appropriately managing risk. This enables us to determine the most appropriate funding products and tenors. See “Balance Sheet and Funding Sources — Balance Sheet Management” for more detail on our balance sheet management process; and
- Raising deposits and obtaining other funding sources that have a long contractual or modeled tenor relative to the liquidity profile of our assets. This reduces the risk that our liabilities will come due in advance of our ability to generate liquidity from the sale of our assets.

Our goal is to ensure that we maintain sufficient liquidity to fund our assets and meet our contractual and contingent obligations in normal times as well as during periods of market stress. Funding plans are reviewed and approved by the Bank Finance Committee and Firmwide Finance Committee on a quarterly basis. In a liquidity crisis, we would first use our GCLA in order to avoid reliance on asset sales (other than our GCLA). However, we recognize that orderly asset sales may be prudent or necessary in a severe or persistent liquidity crisis.

**Contingency Funding Plan.** The Bank maintains a contingency funding plan to provide a framework for analyzing and responding to a liquidity crisis situation or periods of market stress. The contingency funding plan outlines a list of potential risk factors, key reports and metrics that are reviewed on an ongoing basis to assist in assessing the severity of, and managing through, a liquidity crisis and/or market dislocation. The contingency funding plan also describes in detail the potential responses if our assessments indicate that we have entered a liquidity crisis, which include pre-funding for what we estimate will be the potential cash and collateral needs as well as utilizing secondary sources of liquidity. Mitigants and action items to address specific risks which may arise are also described and assigned to individuals responsible for execution.

The contingency funding plan identifies key groups of individuals to foster effective coordination, control and distribution of information, all of which are critical in the management of a crisis or period of market stress. The contingency funding plan also details the responsibilities of these groups and individuals, which include making and disseminating key decisions, coordinating all contingency activities throughout the duration of the crisis or period of market stress, implementing liquidity maintenance activities and managing internal and external communication.

### Liquidity Stress Tests

In order to determine the appropriate size of our GCLA, we use an internal liquidity model, referred to as the Modeled Liquidity Outflow, which captures and quantifies our liquidity risks. We also consider other factors including, but not limited to, an assessment of our potential intraday liquidity needs through an additional internal liquidity model, referred to as the Intraday Liquidity Model, the results of our long-term stress testing models, applicable regulatory requirements and a qualitative assessment of the condition of the financial markets and GS Group (inclusive of the Bank). The results of the Modeled Liquidity Outflow, the Intraday Liquidity Model and the long-term stress testing models are reported to Bank management on a regular basis.

## Management's Discussion and Analysis

**Modeled Liquidity Outflow.** Our Modeled Liquidity Outflow is based on conducting multiple scenarios that include combinations of market-wide and GS Group (inclusive of the Bank) specific stress. These scenarios are characterized by the following qualitative elements:

- Severely challenged market environments, including low consumer and corporate confidence, financial and political instability, adverse changes in market values, including potential declines in equity markets and widening of credit spreads; and
- A GS Group-specific crisis potentially triggered by material losses, reputational damage, litigation, executive departure, and/or a ratings downgrade.

The following are the critical modeling parameters of the Modeled Liquidity Outflow:

- Liquidity needs over a 30-day scenario;
- A two-notch downgrade of our or Group Inc.'s long-term senior unsecured credit ratings;
- A combination of contractual outflows, such as upcoming maturities of unsecured borrowings, and contingent outflows (e.g., actions though not contractually required, we may deem necessary in a crisis). We assume that most contingent outflows will occur within the initial days and weeks of a crisis;
- No issuance of equity or unsecured borrowings;
- No support from additional government funding facilities. Although we have access to funding through the Federal Reserve Bank discount window, we do not assume reliance on additional sources of funding in a liquidity crisis; and
- No asset liquidation, other than the GCLA.

The potential contractual and contingent cash and collateral outflows covered in our Modeled Liquidity Outflow include:

### **Unsecured Funding**

- Contractual: All upcoming maturities of unsecured borrowings and other unsecured funding products. We assume that we will be unable to issue new unsecured borrowings or rollover any maturing borrowings.

### **Deposits**

- Contractual: All upcoming maturities of term deposits. We assume that we will be unable to raise new term deposits or rollover any maturing term deposits.

- Contingent: Partial withdrawals of deposits that have no contractual maturity. The withdrawal assumptions reflect, among other factors, the type of deposit, whether the deposit is insured or uninsured, and our relationship with the depositor.

### **Secured Funding**

- Contractual: A portion of upcoming contractual maturities of secured funding due to either the inability to refinance or the ability to refinance only at wider haircuts (i.e., on terms which require us to post additional collateral). Our assumptions reflect, among other factors, the quality of the underlying collateral, counterparty roll probabilities (our assessment of the counterparty's likelihood of continuing to provide funding on a secured basis at the maturity of the trade) and counterparty concentration.
- Contingent: Adverse changes in value of financial assets pledged as collateral for financing transactions, which would necessitate additional collateral postings under those transactions.

### **OTC Derivatives**

- Contingent: Collateral postings to counterparties due to adverse changes in the value of our OTC derivatives, excluding those that are cleared and settled through central counterparties (OTC-cleared).
- Contingent: Other outflows of cash or collateral related to OTC derivatives, excluding OTC-cleared, including the impact of trade terminations, collateral substitutions, collateral disputes, loss of rehypothecation rights, collateral calls or termination payments required by a two-notch downgrade in our or Group Inc.'s credit ratings, and collateral that has not been called by counterparties, but is available to them.

### **Exchange-Traded and OTC-cleared Derivatives**

- Contingent: Variation margin postings required due to adverse changes in the value of our outstanding exchange-traded and OTC-cleared derivatives.
- Contingent: An increase in initial margin and guaranty fund requirements by derivative clearing houses.

### **Unfunded Commitments**

- Contingent: Draws on our unfunded commitments. Draw assumptions reflect, among other things, the type of commitment and counterparty.

### **Other**

- Other upcoming large cash outflows, such as tax payments.

## Management's Discussion and Analysis

**Intraday Liquidity Model.** Our Intraday Liquidity Model measures our intraday liquidity needs using a scenario analysis characterized by the same qualitative elements as our Modeled Liquidity Outflow. The model assesses the risk of increased intraday liquidity requirements during a scenario where access to sources of intraday liquidity may become constrained.

The following are key modeling elements of the Intraday Liquidity Model:

- Liquidity needs over a one-day settlement period;
- Delays in receipt of counterparty cash payments;
- A reduction in the availability of intraday credit lines at our third-party clearing agents; and
- Higher settlement volumes due to an increase in activity.

**Long-Term Stress Testing.** We utilize a longer-term stress test to take a forward view on our liquidity position through a prolonged stress period in which the Bank experiences a severe liquidity stress and recovers in an environment that continues to be challenging. We are focused on ensuring conservative asset-liability management to prepare for a prolonged period of potential stress, seeking to maintain a long-dated and diversified funding profile, taking into consideration the characteristics and liquidity profile of our assets.

We also run stress tests on a regular basis as part of our routine risk management processes and conduct tailored stress tests on an ad hoc or product-specific basis in response to market developments.

### Model Review and Validation

Bank Finance, working in conjunction with GS Group Treasury, regularly refines the Modeled Liquidity Outflow, Intraday Liquidity Model and the stress testing models to reflect changes in market or economic conditions and GS Group's (inclusive of the Bank's) business mix. Any changes, including model assumptions, are assessed and approved by Liquidity Risk Management.

Model Risk Management is responsible for the independent review and validation of our liquidity models. See "Model Risk Management" for further information about the review and validation of these models.

### Limits

We use liquidity limits at various levels and across liquidity risk types to manage the size of our liquidity exposures. Limits are measured relative to acceptable levels of risk given the liquidity risk tolerance of the Bank. The purpose of the limits is to assist senior management in monitoring and controlling our overall liquidity profile.

The Bank Risk Committee and the Bank Finance Committee approve liquidity risk limits for the Bank. Limits are reviewed frequently and amended, with required approvals, on a permanent and temporary basis, as appropriate, to reflect changing market or business conditions.

Our liquidity risk limits are monitored by Bank Finance, GS Group Treasury and Liquidity Risk Management. Bank Finance and GS Group Treasury are responsible for identifying and escalating, on a timely basis, instances where limits have been exceeded.

### GCLA Metrics

Based on the results of our internal liquidity risk models, described above, as well as our consideration of other factors including, but not limited to, an assessment of our potential intraday liquidity needs and a qualitative assessment of the condition of the financial markets and the Bank, we believe our liquidity position as of both June 2016 and December 2015 was appropriate. As of June 2016 and December 2015, the fair value of certain overnight cash deposits and securities included in our GCLA totaled \$80.32 billion and \$59.33 billion, respectively, and the fair value of these assets averaged \$72.10 billion for the six months ended June 2016 and \$57.74 billion for year ended December 2015. The increase in our GCLA from December 2015 to June 2016 is primarily a result of the acquisition of GE Capital Bank's online deposit platform in April 2016. See Note 13 to the condensed consolidated financial statements for further information about this acquisition.

## Management's Discussion and Analysis

The table below presents the fair value of our GCLA by asset class.

<i>\$ in millions</i>	Average for the	
	Six Months Ended June 2016	Year Ended December 2015
Overnight cash deposits	\$ 62,693	\$ 47,793
U.S. government and federal agency obligations, including highly liquid U.S. federal agency mortgage-backed obligations	9,130	9,844
German, French, Japanese and United Kingdom government obligations	272	106
<b>Total</b>	<b>\$ 72,095</b>	<b>\$ 57,743</b>

GCLA is composed of (i) certain overnight cash deposits, (ii) unencumbered U.S. government and federal agency obligations, including highly liquid U.S. federal agency mortgage-backed obligations, all of which are eligible as collateral in Federal Reserve open market operations and (iii) certain-non U.S. government obligations. We strictly limit our GCLA to a narrowly defined list of securities and cash because they are highly liquid, even in a difficult funding environment. We do not include other potential sources of excess liquidity in our GCLA, such as less liquid unencumbered securities or committed credit facilities.

We maintain our GCLA to enable us to meet current and potential liquidity requirements. Our Modeled Liquidity Outflow and Intraday Liquidity Model incorporate a consolidated requirement for the Bank. Liquidity held directly by the Bank is intended for use only by the Bank to meet its liquidity requirements and is assumed not to be available to its affiliates, including Group Inc., unless (i) legally provided for and (ii) there are no additional regulatory, tax or other restrictions.

### Liquidity Regulatory Framework

The Basel Committee's international framework for liquidity risk measurement, standards and monitoring calls for a liquidity coverage ratio (LCR) designed to ensure that banking organizations maintain an adequate level of unencumbered high-quality liquid assets (HQLA) based on expected net cash outflows under an acute short-term liquidity stress scenario.

The final rules on minimum liquidity standards approved by the U.S. federal bank regulatory agencies are generally consistent with the Basel Committee's framework, but include accelerated transition provisions and more stringent requirements related to both the range of assets that qualify as HQLA and cash outflow assumptions for certain types of funding and other liquidity risks. Our GCLA is substantially the same in composition as the assets that qualify as HQLA under these rules. Under the accelerated transition timeline, the LCR became effective in the United States on January 1, 2015, with a phase-in period whereby firms had an 80% minimum in 2015, which increases by 10% per year until 2017.

The Basel Committee's international framework for liquidity risk measurement, standards and monitoring also calls for a net stable funding ratio (NSFR) designed to promote more medium- and long-term stable funding of the assets and off-balance-sheet activities of banking organizations over a one-year time horizon. The Basel Committee's NSFR framework requires banking organizations to maintain a minimum NSFR of 100% and will be effective on January 1, 2018. In addition, in the second quarter of 2016, the U.S. federal bank regulatory agencies issued a proposed rule that would implement an NSFR for large U.S. banking organizations. The proposal would require banking organizations to ensure they have access to stable funding over a one-year time horizon. The proposed NSFR requirement has an effective date of January 1, 2018, including quarterly disclosure of the ratio, as well as a description of the banking organization's stable funding sources.

The implementation of these rules, and any amendments adopted by the applicable regulatory authorities, could impact our liquidity and funding requirements and practices in the future.

### Credit Ratings

Credit ratings are important when we are competing in certain markets, such as OTC derivatives, and when we seek to engage in longer-term transactions. See "Risk Factors" in Part I of the 2015 Annual Report.

## Management's Discussion and Analysis

The table below presents the unsecured credit ratings and outlook of the Bank by Fitch, Inc. (Fitch), Moody's Investors Service (Moody's), and Standard & Poor's Rating Services (S&P).

	As of June 2016		
	Fitch	Moody's	S&P
Short-term Debt	F1	P-1	A-1
Long-term Debt	A+	A1	A
Short-term Bank Deposits	F1+	P-1	N/A
Long-term Bank Deposits	AA-	A1	N/A
Ratings Outlook	Stable	Stable	Watch Positive

We believe our credit ratings are primarily based on the credit rating agencies' assessment of:

- Our status within GS Group and likelihood of GS Group support;
- Our liquidity, market, credit and operational risk management practices;
- The level and variability of our earnings;
- Our capital base;
- Our primary businesses, reputation and management;
- Our corporate governance; and
- The external operating and economic environment, including, in some cases, the assumed level of government support or other systemic considerations, such as potential resolution.

Certain of our derivatives have been transacted under bilateral agreements with counterparties who may require us to post collateral or terminate the transactions based on changes in our credit ratings. We assess the impact of these bilateral agreements by determining the collateral or termination payments that would occur assuming a downgrade by all rating agencies. A downgrade by any one rating agency, depending on the agency's relative ratings of us at the time of the downgrade, may have an impact which is comparable to the impact of a downgrade by all rating agencies. We allocate a portion of our GCLA to ensure we would be able to make the additional collateral or termination payments that may be required in the event of a two-notch reduction in our long-term credit ratings, as well as collateral that has not been called by counterparties, but is available to them.

The table below presents the additional collateral or termination payments related to our net derivative liabilities under bilateral agreements that could have been called at the reporting date by counterparties in the event of a one-notch and two-notch downgrade in our credit ratings.

	As of	
	June 2016	December 2015
<i>\$ in millions</i>		
Additional collateral or termination payments:		
One-notch downgrade	\$ 332	\$ 485
Two-notch downgrade	566	835

### Cash Flows

Our cash flows are complex and bear little relation to our net earnings and net assets. Consequently, we believe that traditional cash flow analysis is less meaningful in evaluating our liquidity position than the liquidity and asset-liability management policies described above. Cash flow analysis may, however, be helpful in highlighting certain macro trends and strategic initiatives in our businesses.

**Six Months Ended June 2016.** Our cash increased by \$22.75 billion to \$72.80 billion at the end of the first half of 2016. We generated \$26.11 billion in net cash provided by investing and financing activities primarily from net cash acquired as a result of our acquisition of GE Capital Bank's online deposit platform in April 2016 and growth in private bank deposits. We used \$3.36 billion in net cash for operating activities, which primarily reflects an increase in net receivables and payables from customers and counterparties, brokers, dealers and clearing organizations and loans held for sale.

**Six Months Ended June 2015.** Our cash decreased by \$1.08 billion to \$38.78 billion at the end of first half of 2015. We used \$7.62 billion in net cash for operating and investing activities, which primarily reflects an increase in loans receivable. We generated \$6.54 billion in net cash from financing activities primarily due to an increase in bank deposits and proceeds from FHLB advances.

## Management's Discussion and Analysis

### Market Risk Management

#### Overview

Market risk is the risk of loss in the value of our positions, as well as certain other financial assets and financial liabilities, due to changes in market conditions. We employ a variety of risk measures, each described in the respective sections below, to monitor market risk. We hold positions primarily for market making for our clients and for our lending activities. Our positions therefore change based on client demands and our lending opportunities. Categories of market risk include the following:

- Interest rate risk: results from exposures to changes in the level, slope and curvature of yield curves, the volatilities of interest rates, mortgage prepayment speeds and credit spreads;
- Currency rate risk: results from exposures to changes in spot prices, forward prices and volatilities of currency rates; and
- Equity price risk: results from exposures to changes in prices and volatilities of individual equities, baskets of equities and equity indices.

Managers in revenue-producing units are accountable for managing risk within prescribed limits. These managers have in-depth knowledge of their positions, markets and the instruments available to hedge their exposures.

Market Risk Management, which is independent of the revenue-producing units and reports to GS Group's chief risk officer, has primary responsibility for assessing, monitoring and managing market risk at GS Group and the Bank. The Bank makes use of an SLA with Market Risk Management. The Bank's chief risk officer ensures Market Risk Management is providing satisfactory service through evaluating key performance indicators. We monitor and control risks through strong Bank oversight and independent control and support functions across global businesses.

Managers in revenue-producing units and Market Risk Management discuss market information, positions and estimated risk and loss scenarios on an ongoing basis.

#### Market Risk Management Process

We manage our market risk by diversifying exposures, controlling position sizes and establishing economic hedges in related securities or derivatives. This process includes:

- Accurate and timely exposure information incorporating multiple risk metrics;
- A dynamic limit setting framework; and
- Constant communication among revenue-producing units, risk managers and senior management.

**Risk Measures.** Market Risk Management produces risk measures and monitors them against market risk limits set by the Bank Risk Committee. These measures reflect an extensive range of scenarios and the results are aggregated at product, business, GS Group and Bank levels.

We use a variety of risk measures to estimate the size of potential losses for both moderate and more extreme market moves over both short-term and long-term time horizons. Our primary risk measures are VaR, which is used for shorter-term periods, and stress tests. Risk reports detail key risks, drivers and changes for each desk and business, and are distributed daily to senior management of both the revenue-producing units and the independent control and support functions.

**Value-at-Risk.** VaR is the potential loss in value due to adverse market movements over a defined time horizon with a specified confidence level. We typically employ a one-day time horizon with a 95% confidence level. We use a single VaR model which captures risks including interest rates, equity prices and currency rates. As such, VaR facilitates comparison across portfolios of different risk characteristics. VaR also captures the diversification of aggregated risk at the Bank level.

We are aware of the inherent limitations to VaR and therefore use a variety of risk measures in our market risk management process. Inherent limitations to VaR include:

- VaR does not estimate potential losses over longer time horizons where moves may be extreme;
- VaR does not take account of the relative liquidity of different risk positions; and
- Previous moves in market risk factors may not produce accurate predictions of all future market moves.



## Management's Discussion and Analysis

When calculating VaR, we use historical simulations with full valuation of approximately 70,000 market factors as applicable. VaR is calculated at a position level based on simultaneously shocking the relevant market risk factors for that position. We sample from five years of historical data to generate the scenarios for our VaR calculation. The historical data is weighted so that the relative importance of the data reduces over time. This gives greater importance to more recent observations and reflects current asset volatilities, which improves the accuracy of our estimates of potential loss. As a result, even if our positions included in VaR were unchanged, our VaR would increase with increasing market volatility and vice versa.

Given its reliance on historical data, VaR is most effective in estimating risk exposures in markets in which there are no sudden fundamental changes or shifts in market conditions.

Our VaR measure does not include:

- Positions that are best measured and monitored using sensitivity measures; and
- The impact of changes in counterparty and our own credit spreads on derivatives, as well as changes in our own credit spreads on unsecured borrowings for which the fair value option was elected.

We perform daily backtesting of the VaR model (i.e., comparing daily trading net revenues to the VaR measure calculated as of the prior business day) at the Bank level.

**Stress Testing.** Stress testing is a method of determining the effect of various hypothetical stress scenarios on the Bank. We use stress testing to examine risks of specific portfolios as well as the potential impact of significant risk exposures across the Bank. We use a variety of stress testing techniques to calculate the potential loss from a wide range of market moves on our portfolios, including sensitivity analysis, scenario analysis and stress tests. The results of our various stress tests are analyzed together for risk management purposes.

Sensitivity analysis is used to quantify the impact of a market move in a single risk factor across all positions (e.g., equity prices or credit spreads) using a variety of defined market shocks, ranging from those that could be expected over a one-day time horizon up to those that could take many months to occur.

Scenario analysis is used to quantify the impact of a specified event, including how the event impacts multiple risk factors simultaneously. When conducting scenario analysis, we typically consider a number of possible outcomes for each scenario, ranging from moderate to severely adverse market impacts. In addition, these stress tests are constructed using both historical events and forward-looking hypothetical scenarios.

Bank stress testing combines market, credit, operational and liquidity risks into a single combined scenario. The Bank stress tests are primarily used to assess capital adequacy as part of our capital planning and stress testing process; however, we also ensure that Bank stress testing is integrated into our risk governance framework. This includes selecting appropriate scenarios to use for our capital planning and stress testing process. See "Equity Capital Management and Regulatory Capital — Equity Capital Management" above for further information.

Unlike VaR measures, which have an implied probability because they are calculated at a specified confidence level, there is generally no implied probability that our stress test scenarios will occur. Instead, stress tests are used to model both moderate and more extreme moves in underlying market factors. When estimating potential loss, we generally assume that our positions cannot be reduced or hedged (although experience demonstrates that we are generally able to do so).

**Limits.** We use risk limits at various levels in the Bank (including Bank, business and product) to govern risk appetite by controlling the size of our exposures to market risk. Limits are set based on VaR sensitivity and on a range of stress tests relevant to our exposures. Limits are reviewed frequently and amended on a permanent or temporary basis to reflect changing market conditions, business conditions or tolerance for risk.

The Bank Risk Committee approves market risk limits at the Bank, business and product levels. The purpose of the limits is to assist senior management in controlling the Bank's overall risk profile.

Our market risk limits are monitored daily by Market Risk Management, which is responsible for identifying and escalating, on a timely basis, instances where limits have been exceeded.

## Management's Discussion and Analysis

When a risk limit has been exceeded (e.g., due to changes in market conditions, such as increased volatilities or changes in correlations), it is escalated to the Bank chief risk officer and Bank Risk Committee and remediated by an exposure reduction and/or a temporary or permanent increase to the risk limit.

### Model Review and Validation

Our VaR and stress testing models are regularly reviewed by Market Risk Management and enhanced in order to incorporate changes in the composition of positions included in our market risk measures, as well as variations in market conditions. Model Risk Management is responsible for the independent review and validation of our VaR and stress testing models. Significant changes to our VaR and stress testing models are reviewed with GS Group's chief risk officer and GS Group's chief financial officer, and approved by GS Group Firmwide Risk Committee.

See "Model Risk Management" for further information about the review and validation of these models.

### Systems

GS Group has made a significant investment in technology to monitor market risk including:

- An independent calculation of VaR and stress measures;
- Risk measures calculated at individual position levels;
- Attribution of risk measures to individual risk factors of each position;
- The ability to report many different views of the risk measures (e.g., by business or product type); and
- The ability to produce ad hoc analyses in a timely manner.

### Metrics

We analyze VaR at the Bank level and a variety of more detailed levels, including by risk category, business, and region. The tables below present, by risk category, average daily VaR and period-end VaR, as well as the high and low VaR for the period. Diversification effect in the tables below represents the difference between total VaR and the sum of the VaRs for the two risk categories. This effect arises because the two market risk categories are not perfectly correlated.

The table below presents average daily VaR.

\$ in millions	Six Months Ended June	
	2016	2015
<b>Risk Categories</b>		
Interest rates	\$ 19	\$ 18
Currency rates	6	5
Diversification effect	(5)	(4)
<b>Total</b>	<b>\$ 20</b>	<b>\$ 19</b>

Our average daily VaR was essentially unchanged in the first half of 2016 as compared to the first half of 2015, reflecting an increase in the interest rates and currency rates categories primarily due to increased average exposure.

The table below presents period-end VaR, and high and low VaR.

\$ in millions	As of		Six Months Ended	
	June 2016	December 2015	June 2016	
			High	Low
<b>Risk Categories</b>				
Interest rates	\$ 17	\$ 26	\$ 41	\$ 13
Currency rates	5	2	18	2
Equity prices	–	1	3	–
Diversification effect	(4)	(3)		
<b>Total</b>	<b>\$ 18</b>	<b>\$ 26</b>	<b>\$ 34</b>	<b>\$ 14</b>

Our daily VaR decreased to \$18 million as of June 2016 from \$26 million as of December 2015, primarily reflecting a decrease in the interest rates category primarily due to reduced exposures.

During the first half of 2016, the Bank VaR risk limit was not exceeded, raised or reduced.

During the year ended December 2015, the Bank VaR risk limit was not exceeded, raised or reduced.

### Sensitivity Measures

Certain portfolios and individual positions are not included in VaR because VaR is not the most appropriate risk measure. Other sensitivity measures we use to analyze market risk are described below.

## Management's Discussion and Analysis

**10% Sensitivity Measures.** The table below presents market risk for inventory positions that are not included in VaR. The market risk of these positions is determined by estimating the potential reduction in net revenues of a 10% decline in the underlying asset value. Equity positions below primarily relate to investments in qualified affordable housing projects which are included in "Financial instruments owned, at fair value." Debt positions include loans backed by commercial and residential real estate, corporate bank loans and other corporate debt. These debt positions are included in "Financial instruments owned, at fair value." See Note 6 to the condensed consolidated financial statements for further information about cash instruments. These measures do not reflect diversification benefits across asset categories or across other market risk measures.

<i>\$ in millions</i>	As of	
	June 2016	December 2015
<b>Asset Categories</b>		
Equity	\$ 65	\$ 29
Debt	751	708
<b>Total</b>	<b>\$ 816</b>	<b>\$ 737</b>

**Interest Rate Sensitivity.** Loans receivable that are held for investment as of June 2016 and December 2015 were \$36.18 billion and \$36.38 billion, respectively, substantially all of which had floating interest rates. As of June 2016 and December 2015, the estimated sensitivity to a 100 basis point increase in interest rates on such loans was \$328 million and \$343 million, respectively, of additional interest income over a twelve-month period, which does not take into account the potential impact of an increase in costs to fund such loans. See Note 9 to the condensed consolidated financial statements for further information about loans receivable that are held for investment.

### Other Market Risk Considerations

As of June 2016 and December 2015, we had commitments and held loans for which GS Group has obtained credit loss protection from Sumitomo Mitsui Financial Group, Inc. See Note 16 to the condensed consolidated financial statements for further information about such lending commitments.

## Credit Risk Management

### Overview

Credit risk represents the potential for loss due to the default or deterioration in credit quality of a counterparty (e.g., an OTC derivatives counterparty or a borrower) or an issuer of securities or other instruments we hold. Our exposure to credit risk comes mostly from client transactions in loans and lending commitments and OTC derivatives. Credit risk also comes from cash placed with banks, securities financing transactions (i.e., resale and repurchase agreements) and receivables from brokers, dealers, clearing organizations, customers and counterparties.

Credit Risk Management, which is independent of the revenue-producing units and reports to GS Group's chief risk officer, has primary responsibility for assessing, monitoring and managing credit risk at GS Group and the Bank. The Bank makes use of an SLA with Credit Risk Management. The Bank's chief risk officer ensures Credit Risk Management is providing satisfactory service through evaluating key performance indicators. In addition to Credit Risk Management approval, all loans to which the Bank commits that are in excess of defined thresholds must also be approved by a Bank risk officer. The Bank Risk Committee approves the Bank's credit policies. In addition, we hold other positions that give rise to credit risk (e.g., bonds held in our inventory and secondary bank loans). These credit risks are captured as a component of market risk measures, which are monitored and managed by Market Risk Management, consistent with other positions. We also enter into derivatives to manage market risk exposures. Such derivatives also give rise to credit risk, which is monitored and managed by Credit Risk Management.

### Credit Risk Management Process

Effective management of credit risk requires accurate and timely information, a high level of communication and knowledge of customers, countries, industries and products. Our process for managing credit risk includes:

- Approving transactions and setting and communicating credit exposure limits;
- Monitoring compliance with established credit exposure limits;
- Assessing the likelihood that a counterparty will default on its payment obligations, which includes the establishment and continuous review and refinement of underwriting standards in connection with our lending activities;

## Management's Discussion and Analysis

- Measuring our current and potential credit exposure and losses resulting from counterparty default;
- Reporting of credit exposures to Bank senior management, the Bank Board and regulators;
- Use of credit risk mitigants, including collateral and hedging; and
- Communication and collaboration with other independent control and support functions such as operations, legal and compliance.

As part of the risk assessment process, Credit Risk Management performs credit reviews which include initial and ongoing analyses of our counterparties. The Bank employs well-defined underwriting standards and policies, which seek to mitigate credit risk through analysis of a borrower's credit history, financial information, cash flow, sustainability of liquidity and collateral quality adequacy, if applicable. For substantially all of our credit exposures, the core of our process is an annual counterparty credit review. A credit review is an independent analysis of the capacity and willingness of a counterparty to meet its financial obligations, resulting in an internal credit rating. The determination of internal credit ratings also incorporates assumptions with respect to the nature of and outlook for the counterparty's industry, and the economic environment. Senior personnel within Credit Risk Management, with expertise in specific industries, inspect and approve credit reviews and internal credit ratings.

Our global credit risk management systems capture credit exposure to individual counterparties and on an aggregate basis to counterparties and their subsidiaries (economic groups). These systems also provide management with comprehensive information on our aggregate credit risk by product, internal credit rating, industry, country and region.

### Risk Measures and Limits

We measure our credit risk based on the potential loss in the event of non-payment by a counterparty using current and potential exposures. For loans and lending commitments, the primary measure is a function of the notional amount of the position. For derivatives and securities financing transactions, current exposure represents the amount presently owed to us after taking into account applicable netting and collateral arrangements while potential exposure represents our estimate of the future exposure that could arise over the life of a transaction based on market movements within a specified confidence level. Potential exposure also takes into account netting and collateral arrangements.

We use credit limits at various levels (counterparty including affiliates, economic group, industry, country) to control the size of our credit exposures. Limits for counterparties and economic groups are reviewed regularly and revised to reflect changing risk appetites for a given counterparty or group of counterparties. Limits for industries and countries are based on our risk tolerance and are designed to allow for regular monitoring, review, escalation and management of credit risk concentrations. The GS Group Risk Committee of the Board and the GS Group Risk Governance Committee (through delegated authority from the Firmwide Risk Committee) approve credit risk limits at the firmwide, business and product levels, inclusive of Bank. Credit Risk Management sets credit limits for individual counterparties (including affiliates), economic groups, industries and countries. Policies authorized by the Firmwide Risk Committee, the GS Group Risk Governance Committee and the GS Group Credit Policy Committee prescribe the level of formal approval required for us to assume credit exposure to a counterparty across all product areas, taking into account any applicable netting provisions, collateral or other credit risk mitigants.

### Stress Tests

We use regular stress tests to calculate the credit exposures, including potential concentrations that would result from applying shocks to counterparty credit ratings or credit risk factors (e.g., currency rates, credit spreads, interest rates, equity prices). These shocks include a wide range of moderate and more extreme market movements. Some of our stress tests include shocks to multiple risk factors, consistent with the occurrence of a severe market or economic event. Unlike potential exposure, which is calculated within a specified confidence level, with a stress test there is generally no assumed probability of these events occurring.

We run stress tests on a regular basis as part of our routine risk management processes and conduct tailored stress tests on an ad hoc basis in response to market developments. Stress tests are regularly conducted jointly with our market and liquidity risk functions.

### Model Review and Validation

Our potential credit exposure and stress testing models, and any changes to such models or assumptions, are reviewed by Model Risk Management. See "Model Risk Management" for further information about the review and validation of these models.

## Management's Discussion and Analysis

### Risk Mitigants

To reduce our credit exposures on loans and lending commitments, depending on the credit quality of the borrower and other characteristics of the transaction, we employ a variety of potential risk mitigants. Risk mitigants include collateral provisions, guarantees, covenants, structural seniority of the bank loan claims and, for certain lending commitments, provisions in the legal documentation that allow us to adjust loan amounts, pricing, structure and other terms as market conditions change. The type and structure of risk mitigants employed can significantly influence the degree of credit risk involved in a loan or lending commitment.

For derivatives and securities financing transactions, we may enter into netting agreements with counterparties that permit us to offset receivables and payables with such counterparties. We may also reduce credit risk with counterparties by entering into agreements that enable us to obtain collateral from them on an upfront or contingent basis and/or to terminate transactions if the counterparty's credit rating falls below a specified level. We monitor the fair value of the collateral on a daily basis to ensure that our credit exposures are appropriately collateralized. We seek to minimize exposures where there is a significant positive correlation between the creditworthiness of our counterparties and the market value of collateral we receive.

When we do not have sufficient visibility into a counterparty's financial strength or when we believe a counterparty requires support from its parent, we may obtain third-party guarantees of the counterparty's obligations. We may also mitigate our credit risk using credit derivatives or participation agreements.

### Credit Exposures

As of June 2016, our credit exposures increased as compared with December 2015, primarily reflecting increases in cash deposits with central banks and OTC derivatives, partially offset by decreases in loans and lending commitments. The percentage of our credit exposures arising from non-investment-grade counterparties (based on our internally determined public rating agency equivalents) decreased as compared with December 2015, reflecting an increase in investment-grade credit exposure related to cash deposits with central banks and a decrease in non-investment-grade loans and lending commitments.

During the six months ended June 2016, the number of counterparty defaults increased as compared with the same prior year period, and such defaults primarily occurred within loans and lending commitments and derivatives. The total number of counterparty defaults remained low, representing less than 0.5% of all counterparties. Estimated losses associated with counterparty defaults were higher compared with the prior year and were not material to the Bank. Our credit exposures are described further below.

**Cash.** Cash includes both interest-bearing and non-interest-bearing deposits. To mitigate the risk of credit loss, we place substantially all of our deposits with highly-rated banks and central banks.

**OTC Derivatives.** Our credit exposure on OTC derivatives arises primarily from our market-making activities. As a market maker, we enter into derivative transactions to provide liquidity to clients and to facilitate the transfer and hedging of their risks. We also enter into derivatives to manage market risk exposures. We manage our credit exposure on OTC derivatives using the credit risk process, measures, limits and risk mitigants described above.

Derivatives are reported on a net-by-counterparty basis (i.e., the net payable or receivable for derivative assets and liabilities for a given counterparty) when a legal right of setoff exists under an enforceable netting agreement. Derivatives are accounted for at fair value, net of cash collateral received or posted under enforceable credit support agreements. We generally enter into OTC derivatives transactions under bilateral collateral arrangements with daily exchange of collateral. As credit risk is an essential component of fair value, we include a credit valuation adjustment (CVA) in the fair value of derivatives to reflect counterparty credit risk, as described in Note 7 to the condensed consolidated financial statements. CVA is a function of the present value of expected exposure, the probability of counterparty default and the assumed recovery upon default.

## Management's Discussion and Analysis

The table below presents the distribution of our exposure to OTC derivatives by tenor, both before and after the effect of collateral and netting agreements.

<i>\$ in millions</i>	Investment-Grade	Non-Investment-Grade / Unrated	Total
<b>As of June 2016</b>			
Less than 1 year	\$ 6,186	\$ 252	\$ 6,438
1 - 5 years	19,900	662	20,562
Greater than 5 years	59,028	666	59,694
Total	85,114	1,580	86,694
Netting	(73,237)	(295)	(73,532)
<b>OTC derivative assets</b>	<b>\$ 11,877</b>	<b>\$ 1,285</b>	<b>\$ 13,162</b>
<b>Net credit exposure</b>	<b>\$ 8,560</b>	<b>\$ 1,263</b>	<b>\$ 9,823</b>
<b>As of December 2015</b>			
Less than 1 year	\$ 5,053	\$ 126	\$ 5,179
1 - 5 years	18,020	551	18,571
Greater than 5 years	50,720	540	51,260
Total	73,793	1,217	75,010
Netting	(64,299)	(199)	(64,498)
OTC derivative assets	\$ 9,494	\$ 1,018	\$ 10,512
Net credit exposure	\$ 7,314	\$ 861	\$ 8,175

In the table above:

- Tenor is based on expected duration for mortgage-related credit derivatives and generally on remaining contractual maturity for other derivatives.
- Receivable and payable balances for the same counterparty across tenor categories are netted under enforceable netting agreements, and cash collateral received is netted under enforceable credit support agreements.
- Receivable and payable balances with the same counterparty in the same tenor category are netted within such tenor category.
- Net credit exposure represents OTC derivative assets, included in "Financial instruments owned, at fair value," less cash collateral and the fair value of securities collateral, primarily U.S. government and federal agency obligations and non-U.S. government and agency obligations, received under credit support agreements, which management considers when determining credit risk, but such collateral is not eligible for netting under U.S. GAAP.

The tables below present the distribution of our exposure to OTC derivatives by tenor and our internally determined public rating agency equivalents.

<i>\$ in millions</i>	Investment-Grade				Total
	AAA	AA	A	BBB	
<b>As of June 2016</b>					
Less than 1 year	\$ 48	\$ 1,639	\$ 3,667	\$ 832	\$ 6,186
1 - 5 years	345	4,801	11,019	3,735	19,900
Greater than 5 years	1,331	26,115	15,317	16,265	59,028
Total	1,724	32,555	30,003	20,832	85,114
Netting	(280)	(28,470)	(24,691)	(19,796)	(73,237)
<b>OTC derivative assets</b>	<b>\$ 1,444</b>	<b>\$ 4,085</b>	<b>\$ 5,312</b>	<b>\$ 1,036</b>	<b>\$ 11,877</b>
<b>Net credit exposure</b>	<b>\$ 1,448</b>	<b>\$ 2,761</b>	<b>\$ 3,461</b>	<b>\$ 890</b>	<b>\$ 8,560</b>
<b>As of December 2015</b>					
Less than 1 year	\$ 54	\$ 1,023	\$ 3,556	\$ 420	\$ 5,053
1 - 5 years	646	5,785	10,021	1,568	18,020
Greater than 5 years	1,056	25,206	13,837	10,621	50,720
Total	1,756	32,014	27,414	12,609	73,793
Netting	(386)	(29,158)	(22,567)	(12,188)	(64,299)
OTC derivative assets	\$ 1,370	\$ 2,856	\$ 4,847	\$ 421	\$ 9,494
Net credit exposure	\$ 1,370	\$ 2,250	\$ 3,342	\$ 352	\$ 7,314

<i>\$ in millions</i>	Non-Investment-Grade / Unrated		Total
	BB or lower	Unrated	
<b>As of June 2016</b>			
Less than 1 year	\$ 252	\$ -	\$ 252
1 - 5 years	662	-	662
Greater than 5 years	666	-	666
Total	1,580	-	1,580
Netting	(295)	-	(295)
<b>OTC derivative assets</b>	<b>\$ 1,285</b>	<b>\$ -</b>	<b>\$ 1,285</b>
<b>Net credit exposure</b>	<b>\$ 1,263</b>	<b>\$ -</b>	<b>\$ 1,263</b>
<b>As of December 2015</b>			
Less than 1 year	\$ 124	\$ 2	126
1 - 5 years	543	8	551
Greater than 5 years	540	-	540
Total	1,207	10	1,217
Netting	(189)	(10)	(199)
OTC derivative assets	\$ 1,018	\$ -	\$ 1,018
Net credit exposure	\$ 861	\$ -	\$ 861

## Management's Discussion and Analysis

**Lending and Financing Activities.** We manage our lending and financing activities using the credit risk process (including adherence to product underwriting standards), measures, limits and risk mitigants described above. Other lending positions, including secondary trading positions, are risk-managed as a component of market risk.

- **Lending Activities.** Our lending activities include lending to investment-grade and non-investment-grade corporate borrowers. Loans and lending commitments associated with these activities are principally used for operating liquidity and general corporate purposes or in connection with contingent acquisitions. Our lending activities also include extending loans to borrowers that are secured by commercial and other real estate. See the tables below for further information about our credit exposures associated with these lending activities.
- **Securities Financing Transactions.** We enter into securities financing transactions in order to, among other things, facilitate client activities and acquire securities to cover short positions. We bear credit risk related to resale agreements only to the extent that cash advanced or the value of securities pledged or delivered to the counterparty exceeds the value of the collateral received. We also have credit exposure on repurchase agreements to the extent that the value of securities pledged or delivered to the counterparty for these transactions exceeds the amount of cash or collateral received. Securities collateral obtained for securities financing transactions primarily includes U.S. government and federal agency obligations and U.S. corporates. We had approximately \$226 million and \$227 million as of June 2016 and December 2015, respectively, of credit exposure related to securities financing transactions reflecting both netting agreements and collateral that management considers when determining credit risk.

- **Other Credit Exposures.** We are exposed to credit risk from our receivables from customers and counterparties, brokers, dealers and clearing organizations. These receivables are primarily comprised of initial cash margin placed with clearing organizations and receivables related to sales of loans which have traded, but not yet settled. These receivables generally have minimal credit risk due to the short-term nature of receivables related to loan settlements and the low probability of clearing organization default. Our net credit exposure related to these activities was approximately \$2.99 billion and \$2.42 billion as of June 2016 and December 2015, respectively, and was primarily comprised of initial margin (both cash and securities) placed with investment-grade clearing organizations. The regional breakdown of our net credit exposure related to these activities was approximately 6% and 7% in the Americas, approximately 90% and 92% in Europe, Middle East and Africa (EMEA) and approximately 4% and 1% in Asia as of June 2016 and December 2015, respectively.

In addition, we extend other loans and lending commitments to our private wealth management clients that are primarily secured by residential real estate, securities or other assets. We also purchase loans backed by residential real estate and consumer loans. The gross exposure related to such loans and lending commitments was approximately \$22.16 billion and \$21.28 billion as of June 2016 and December 2015, respectively. Our net credit exposure related to these activities was substantially all concentrated in the Americas as of both June 2016 and December 2015. The fair value of the collateral received against such loans and lending commitments generally exceeded the gross exposure as of both June 2016 and December 2015.

## Management's Discussion and Analysis

### Credit Exposure by Industry, Region and Credit Quality

The tables below present our credit exposure related to cash, OTC derivatives, and loans and lending commitments (excluding credit exposures described above in "Securities Financing Transactions" and "Other Credit Exposures") broken down by industry, region and credit quality.

<i>\$ in millions</i>	Cash as of	
	June 2016	December 2015
<b>Credit Exposure by Industry</b>		
Financial Institutions	\$ 485	\$ 538
Sovereign	72,312	49,507
<b>Total</b>	<b>\$ 72,797</b>	<b>\$ 50,045</b>
<b>Credit Exposure by Region</b>		
Americas <sup>1</sup>	\$ 72,730	\$ 49,884
EMEA	33	37
Asia	34	124
<b>Total</b>	<b>\$ 72,797</b>	<b>\$ 50,045</b>
<b>Credit Exposure by Credit Quality (Credit Rating Equivalent)</b>		
AAA <sup>1</sup>	\$ 72,312	\$ 49,519
AA	133	100
A	279	415
BBB or lower	73	11
<b>Total</b>	<b>\$ 72,797</b>	<b>\$ 50,045</b>

1. Substantially all cash is held at the Federal Reserve Bank.

<i>\$ in millions</i>	OTC Derivatives as of	
	June 2016	December 2015
<b>Credit Exposure by Industry</b>		
Funds	\$ 1,397	\$ 678
Financial Institutions	4,698	4,119
Consumer, Retail & Healthcare	230	65
Sovereign	502	748
Municipalities & Nonprofit	3,773	3,024
Natural Resources & Utilities	819	586
Real Estate	46	31
Technology, Media & Telecommunications	374	159
Diversified Industrials	687	513
Other	636	589
<b>Total</b>	<b>\$ 13,162</b>	<b>\$ 10,512</b>
<b>Credit Exposure by Region</b>		
Americas	\$ 9,223	\$ 7,003
EMEA	2,836	2,247
Asia	1,103	1,262
<b>Total</b>	<b>\$ 13,162</b>	<b>\$ 10,512</b>
<b>Credit Exposure by Credit Quality (Credit Rating Equivalent)</b>		
AAA	\$ 1,444	\$ 1,370
AA	4,085	2,856
A	5,312	4,847
BBB	1,036	421
BB or lower	1,285	1,018
Unrated	-	-
<b>Total</b>	<b>\$ 13,162</b>	<b>\$ 10,512</b>

<i>\$ in millions</i>	Loans and Lending Commitments as of	
	June 2016	December 2015
<b>Credit Exposure by Industry</b>		
Funds	\$ 2,451	\$ 2,268
Financial Institutions	9,233	12,420
Consumer, Retail & Healthcare	25,057	27,421
Sovereign	477	43
Municipalities & Nonprofit	880	628
Natural Resources & Utilities	22,621	19,856
Real Estate	8,567	11,163
Technology, Media & Telecommunications	17,922	23,102
Diversified Industrials	16,436	15,517
Other	9,524	10,323
<b>Total</b>	<b>\$ 113,168</b>	<b>\$ 122,741</b>
<b>Credit Exposure by Region</b>		
Americas	\$ 93,302	\$ 100,290
EMEA	18,039	20,739
Asia	1,827	1,712
<b>Total</b>	<b>\$ 113,168</b>	<b>\$ 122,741</b>
<b>Credit Exposure by Credit Quality (Credit Rating Equivalent)</b>		
AAA	\$ 3,132	\$ 4,148
AA	7,618	7,297
A	22,208	24,622
BBB	39,009	38,254
BB or lower	40,935	48,127
Unrated	266	293
<b>Total</b>	<b>\$ 113,168</b>	<b>\$ 122,741</b>

## Operational Risk Management

### Overview

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Our exposure to operational risk arises from routine processing errors as well as extraordinary incidents, such as major systems failures or legal and regulatory matters. Potential types of loss events related to internal and external operational risk include:

- Clients, products and business practices;
- Execution, delivery and process management;
- Business disruption and system failures;
- Employment practices and workplace safety;
- Internal fraud; and
- External fraud.



## Management's Discussion and Analysis

We maintain a comprehensive control framework designed to provide a well-controlled environment to minimize operational risks. Operational Risk Management is a risk management function independent of the revenue-producing units and reports to GS Group's chief risk officer. Operational Risk Management has primary responsibility for developing and implementing policies, methodologies and a formalized framework for operational risk management. The Bank makes use of an SLA with Operational Risk Management. The Bank's chief risk officer ensures Operational Risk Management is providing satisfactory service through evaluating key performance indicators.

### Operational Risk Management Process

Managing operational risk requires timely and accurate information as well as a strong control culture. We seek to manage our operational risk through:

- Training, supervision and development of our people;
- Active participation of senior management in identifying and mitigating key operational risks across the Bank;
- Independent control and support functions that monitor operational risk on a daily basis, and implementation of extensive policies and procedures, and controls designed to prevent the occurrence of operational risk events;
- Proactive communication between revenue-producing units and independent control and support functions; and
- A network of systems throughout the Bank to facilitate the collection of data used to analyze and assess our operational risk exposure.

We combine top-down and bottom-up approaches to manage and measure operational risk. From a top-down perspective, senior management assesses Bank and business-level operational risk profiles. From a bottom-up perspective, revenue-producing units and independent control and support functions at the Bank are responsible for risk management on a day-to-day basis, including identifying, mitigating, and escalating operational risks to senior management.

Our operational risk framework is in part designed to comply with the operational risk measurement rules under the Revised Capital Framework and has evolved based on the changing needs of our businesses and regulatory guidance.

Our framework comprises the following practices:

- Risk identification and reporting;
- Risk measurement; and
- Risk monitoring.

Internal Audit performs an independent review of our operational risk framework, including our key controls, processes and applications, on an annual basis to assess the effectiveness of our framework.

The Bank expanded its existing risk management platform and controls to incorporate the additional employees, vendors, technology, call center and compliance controls, including the expansion of fraud prevention, anti-money laundering and consumer compliance considerations, related to the growing number of retail customers as a result of the acquisition of GE Capital Bank's online deposit platform.

### Risk Identification and Reporting

The core of our operational risk management framework is risk identification and reporting. We have a comprehensive data collection process, which is in line with GS Group's policies and procedures, for operational risk events.

The Bank adheres to GS Group's policies that require managers in revenue-producing units and independent control and support functions to escalate operational risk events. When operational risk events are identified, the policies require that the events be documented and analyzed to determine whether changes are required in our systems and/or processes to further mitigate the risk of future events.

We have established thresholds to monitor the impact of an operational risk event, including single loss events and cumulative losses over a twelve-month period, as well as escalation protocols. We also provide periodic operational risk reports which include incidents that breach escalation thresholds to senior management and the Bank Risk Committee.

In addition, firmwide systems capture internal operational risk event data, key metrics such as transaction volumes, and statistical information such as performance trends.

## Management's Discussion and Analysis

We use an internally-developed operational risk management application to aggregate and organize this information. Managers from both revenue-producing units and independent control and support functions analyze the information to evaluate operational risk exposures and identify businesses, activities or products with heightened levels of operational risk. We also provide periodic operational risk reports to senior management, risk committees and the Bank Board.

### Risk Measurement

We measure our operational risk exposure over a twelve-month time horizon using both statistical modeling and scenario analyses, which involve qualitative assessments of the potential frequency and extent of potential operational risk losses, for each business. Operational risk measurement incorporates qualitative and quantitative assessments of factors including:

- Internal and external operational risk event data;
- Assessments of internal controls;
- Evaluations of the complexity of business activities;
- The degree of and potential for automation in processes;
- New product information;
- The legal and regulatory environment;
- Changes in the markets for our products and services, including the diversity and sophistication of our customers and counterparties; and
- Liquidity of the capital markets and the reliability of the infrastructure that supports the capital markets.

The results from these scenario analyses are used to monitor changes in operational risk and to determine business lines that may have heightened exposure to operational risk. These analyses ultimately are used in the determination of the appropriate level of operational risk capital to hold.

### Risk Monitoring

We evaluate changes in the operational risk profile of the Bank and its businesses, including changes in business mix or jurisdictions in which we operate, by monitoring the factors noted above at a Bank level. We have both detective and preventive internal controls, which are designed to reduce the frequency and severity of operational risk losses and the probability of operational risk events. We monitor the results of assessments and independent internal audits of these internal controls.

### Model Review and Validation

The statistical models utilized by Operational Risk Management are subject to independent review and validation by Model Risk Management. See "Model Risk Management" for further information about the review and validation of these models.

## Model Risk Management

### Overview

Model risk is the potential for adverse consequences from decisions made based on model outputs that may be incorrect or used inappropriately. We rely on quantitative models across our business activities primarily to value certain financial assets and liabilities, to monitor and manage our risk, and to measure and monitor our regulatory capital.

The Bank's framework for managing model risk is consistent with and part of GS Group's framework. GS Group's model risk management framework is managed through a governance structure and risk management controls, which encompass standards designed to ensure we maintain a comprehensive model inventory, including risk assessment and classification, sound model development practices, independent review and model-specific usage controls. The GS Group Firmwide Risk Committee and the GS Group Firmwide Model Risk Control Committee oversee our model risk management framework. Model Risk Management, which is independent of model developers, model owners and model users, reports to GS Group's chief risk officer. Model Risk Management has primary responsibility for identifying and reporting significant risks associated with models. The Bank makes use of an SLA with Model Risk Management. The Bank's chief risk officer ensures Model Risk Management is providing satisfactory service through evaluating key performance indicators. Model Risk Management provides periodic updates to senior management, risk committees, including the Bank Risk Committee and the GS Group Risk Committee of the Board.

## Management's Discussion and Analysis

### Model Review and Validation

Model Risk Management consists of quantitative professionals who perform an independent review, validation and approval of models. This review includes an analysis of the model documentation, independent testing, an assessment of the appropriateness of the methodology used, and verification of compliance with model development and implementation standards. Model Risk Management reviews all existing models on an annual basis, as well as new models or significant changes to models.

The model validation process incorporates a review of models and trade and risk parameters across a broad range of scenarios (including extreme conditions) in order to critically evaluate and verify:

- The model's conceptual soundness, including the reasonableness of model assumptions, and suitability for intended use;
- The testing strategy utilized by the model developers to ensure that the models function as intended;

- The suitability of the calculation techniques incorporated in the model;
- The model's accuracy in reflecting the characteristics of the related product and its significant risks;
- The model's consistency with models for similar products; and
- The model's sensitivity to input parameters and assumptions.

See "Critical Accounting Policies — Fair Value — Review of Valuation Models," "Liquidity Risk Management," "Market Risk Management," "Credit Risk Management" and "Operational Risk Management" for further information about our use of models within these areas.

## Management's Discussion and Analysis

### Cautionary Statement

In this discussion and analysis of our financial condition and results of operations, we have included information that may constitute "forward-looking statements." Forward-looking statements are not historical facts, but instead represent only our beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside our control. This information includes statements other than historical information or statements of current condition and may relate to our future plans and objectives and results, among other things, and may also include statements about the effect of changes to the capital, leverage, liquidity, long-term debt and total loss-absorbing capacity rules applicable to banks and bank holding companies, the impact of the Dodd-Frank Act on our business and operations, and mortgage-related contingencies or various legal proceedings as set forth in Notes 16 and 22, respectively, to the condensed consolidated financial statements as well as statements about the results of our Dodd-Frank Act and bank stress tests, statements about the objectives and effectiveness of our risk management and liquidity policies, statements about new business initiatives or trends in or growth opportunities for our business, and statements about our future status, activities or reporting under U.S. or non-U.S. banking and financial regulation.

By identifying these statements for you in this manner, we are alerting you to the possibility that our actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements. Important factors that could cause our actual results and financial condition to differ from those indicated in these forward-looking statements include, among others, those described in "Risk Factors" in Part I of the 2015 Annual Report.

## Supplemental Financial Information

## Distribution of Assets, Liabilities and Shareholder's Equity

The table below presents a summary of consolidated average balances and interest rates.

\$ in millions	Six Months Ended June					
	2016			2015		
	Average Balance	Interest	Average Rate (annualized)	Average Balance	Interest	Average Rate (annualized)
<b>Assets</b>						
Deposits with banks <sup>1</sup>	\$ 62,776	\$ 159	0.51%	\$ 47,013	\$ 60	0.26%
Securities purchased under agreements to resell <sup>2</sup>	3,119	65	4.17%	4,969	30	1.21%
Financial instruments owned, at fair value <sup>3</sup>	26,210	402	3.07%	28,746	452	3.14%
Loans receivable <sup>4</sup>	37,660	540	2.87%	28,086	391	2.78%
Other interest-earning assets <sup>5</sup>	8,973	136	3.03%	6,911	29	0.84%
<b>Total interest-earnings assets</b>	<b>\$ 138,738</b>	<b>\$ 1,302</b>	<b>1.88%</b>	<b>\$ 115,725</b>	<b>\$ 962</b>	<b>1.66%</b>
Cash and due from banks	317			690		
Other non-interest earnings assets <sup>6</sup>	14,787			13,870		
<b>Total assets</b>	<b>\$ 153,842</b>			<b>\$ 130,285</b>		
<b>Liabilities</b>						
Interest-bearing deposits <sup>7</sup>	\$ 102,621	\$ 358	0.70%	\$ 80,798	\$ 166	0.41%
Securities sold under agreements to repurchase, at fair value <sup>2</sup>	4,749	10	0.42%	7,483	–	–
Financial instruments sold, but not yet purchased, at fair value <sup>3</sup>	2,222	20	1.80%	1,984	16	1.61%
Borrowings <sup>8</sup>	5,633	35	1.24%	3,804	29	1.52%
Other interest-bearing liabilities <sup>5</sup>	4,023	114	5.67%	3,673	91	4.96%
<b>Total interest-bearing liabilities</b>	<b>\$ 119,248</b>	<b>\$ 537</b>	<b>0.90%</b>	<b>\$ 97,742</b>	<b>\$ 302</b>	<b>0.62%</b>
Non-interest-bearing deposits	2,470			1,446		
Other non-interest-bearing liabilities <sup>6</sup>	8,607			9,306		
<b>Total liabilities</b>	<b>\$ 130,325</b>			<b>\$ 108,494</b>		
Shareholder's equity	23,517			21,791		
<b>Total liabilities and shareholder's equity</b>	<b>\$ 153,842</b>			<b>\$ 130,285</b>		

1. See "Results of Operations" for further information about deposits with banks and related interest.

2. See Note 10 to the condensed consolidated financial statements and "Results of Operations" for further information about securities purchased under agreements to resell and securities sold under agreements to repurchase and related interest.

3. See Notes 4 through 8 to the condensed consolidated financial statements and "Results of Operations" for further information about financial instruments owned, at fair value and financial instruments sold, but not yet purchased at fair value and related interest. Derivative instruments are included in other non-interest-earning assets and other non-interest-bearing liabilities.

4. See Note 9 to the condensed consolidated financial statements and "Results of Operations" for further information about loans receivable and related interest.

5. See Note 19 to the condensed consolidated financial statements and "Results of Operations" for further information about other interest income and expense.

6. Consists of certain receivables and payables from customers and counterparties. Derivative instruments are included in other non-interest-earning assets and other non-interest-bearing liabilities.

7. See Note 13 to the condensed consolidated financial statements and "Results of Operations" for further information about deposits and related interest.

8. Includes subordinated borrowings and other secured financings on the condensed consolidated statements of financial condition. See Notes 10 and 14 to the condensed consolidated financial statements and "Balance Sheet Analysis and Metrics" for further information about short-term and long-term borrowings and related interest.